

1			5			10			15									
gct	gaa	gac	tcc	agt	atg	caa	ctg	act	aca	agg	aga	cag	aag	gct	gag	98		
Ala	Glu	Asp	Ser	Ser	Met	Gln	Leu	Thr	Thr	Arg	Arg	Gln	Lys	Ala	Glu			
			20			25			30									
gcc	ggg	gtg	cta	gag	aac	ctt	gcc	gtg	ctg	gaa	ttc	acg	ttg	acg	ccc	146		
Ala	Gly	Val	Leu	Glu	Asn	Leu	Ala	Val	Leu	Glu	Phe	Thr	Leu	Thr	Pro			
			35			40			45									
cca	cgg	agc	tct	gct	gca	gag	ccc	tcg	agt	ccc	gca	ctt	ccg	ggc	gcc	194		
Pro	Arg	Ser	Ser	Ala	Ala	Glu	Pro	Ser	Ser	Pro	Ala	Leu	Pro	Gly	Ala			
			50			55			60									
agg	tgg	cgc	tgg	ttc	tgt	tgc	caa	ctc	gga	gag	act	gag	ctg	ggc	cac	242		
Arg	Trp	Arg	Trp	Phe	Cys	Cys	Gln	Leu	Gly	Glu	Thr	Glu	Leu	Gly	His			
			65			70			75									
gca	aga	tgg	cgc	cgt	ccg	cct	tgc	tgc	gtc	ccc	ttt	ccc	ggc	tgc	tgg	290		
Ala	Arg	Trp	Arg	Arg	Pro	Pro	Cys	Cys	Val	Pro	Phe	Pro	Gly	Cys	Trp			
			80			85			90			95						
ccc	ccg	cca	ggc	tcc	cga	gcg	gcc	ctt	cag	tgc	gat	caa	agt	tct	acg	338		
Pro	Pro	Pro	Gly	Ser	Arg	Ala	Ala	Leu	Gln	Cys	Asp	Gln	Ser	Ser	Thr			
			100			105			110									
tgc	gag	agc	cgc	cga	atg	cca	aac	ctg	act	ggc	tgaaagttg	gttcaccttg				391		
Cys	Glu	Ser	Arg	Met	Pro	Asn	Leu	Thr	Gly									
			115			120												
ggcaccactg			tcttcttgtg			gatctatctc			atcaaacaac			acaatgaaga			tatttttagag			451
tacaaaagaa			gaaatgggct			ggaataaact			tttgaacac			taatgtagta			tgctccgtat			511
agtgattgta			gctgttcttc			tggattcacc			atctgttgag			ttgtaaatgt			gagagaaaaa			571
gttatatgtg			ratatatatc			aagcc												596

```
<210> 3990
<211> 597
<212> DNA
<213> Homo sapiens
```

```
<220>  
<221> CDS  
<222> 10..507
```

[illegible]



gag gat cat aag gcc tgagctcagg ccttacctcg tgc  
 Glu Asp His Lys Ala  
 125

426

<210> 3992

<211> 598

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> 76..516

<400> 3992

aagcaccctt cagcagttcc acacactcgc ttctggaacg tctgaggtta tcaataagct	60
cctagtccag acgcc atg ggt cat ttc aca gag gag gac aag gct act atc	111
Met Gly His Phe Thr Glu Glu Asp Lys Ala Thr Ile	
1 5 10	
aca agc ctg tgg ggc aag gtg aat gtg gaa gat gct gga gga gaa acc	159
Thr Ser Leu Trp Gly Lys Val Asn Val Glu Asp Ala Gly Gly Glu Thr	
15 20 25	
ctg gga agg ctc ctg gtt gtc tac cca tgg acc cag agg ttc ttt gac	207
Leu Gly Arg Leu Leu Val Val Tyr Pro Trp Thr Gln Arg Phe Phe Asp	
30 35 40	
agc ttt ggc aac ctg tcc tct gcc tct gcc atc atg ggc aac ccc aaa	255
Ser Phe Gly Asn Leu Ser Ser Ala Ser Ala Ile Met Gly Asn Pro Lys	
45 50 55 60	
gtc aag gca cat ggc aag aag gtg ctg act tcc ttg gga gat gcc ata	303
Val Lys Ala His Gly Lys Lys Val Leu Thr Ser Leu Gly Asp Ala Ile	
65 70 75	
aag cac ctg gat gat ctc aag ggc acc ttt gcc cag ctg agt gaa ctg	351
Lys His Leu Asp Asp Leu Lys Gly Thr Phe Ala Gln Leu Ser Glu Leu	
80 85 90	
cac tgt gac aag ctg cat gtg gat cct gag aac ttc aag ctc ctg gga	399
His Cys Asp Lys Leu His Val Asp Pro Glu Asn Phe Lys Leu Leu Gly	
95 100 105	
awt gtg ctg gtg acc gtt ttg gca atc cat ttc ggc aaa gaa ttc acc	447
Xaa Val Leu Val Thr Val Leu Ala Ile His Phe Gly Lys Glu Phe Thr	
110 115 120	
cct gag gtg cag gct tcc tgg cag aag atg gtg act gca gtg gcc agt	495
Pro Glu Val Gln Ala Ser Trp Gln Lys Met Val Thr Ala Val Ala Ser	
125 130 135 140	
gcc ctg tcc tcc aga tac cac tgagcctctt gcccatgatt cagagctttc	546
Ala Leu Ser Ser Arg Tyr His	
145	
aaggataggc tttattctgc aagcaatcaa ataataaawc tattctgctg ag	598

<210> 3993

<211> 474

<212> DNA

<213> Homo sapiens

<220>

<221> CDS  
<222> 35..436

<400> 3993

```

agcagctagt cacgctcggt accaggcgca gatc atg gca ggc agc cgg ctg gaa      55
                               Met Ala Gly Ser Arg Leu Glu
                               1           5
acc gta ggg agc atc ttc tct cgg act cgg gac ctg gtt cgg gcc ggg      103
Thr Val Gly Ser Ile Phe Ser Arg Thr Arg Asp Leu Val Arg Ala Gly
      10           15           20
gtg ctg aag gag aag ccc ctg tgg ttt gac gta tat gac gcc ttt ccc      151
Val Leu Lys Glu Lys Pro Leu Trp Phe Asp Val Tyr Asp Ala Phe Pro
      25           30           35
ccg ctg agg gag ccc gtc ttc caa agg cct cga gtg cga tat ggc aaa      199
Pro Leu Arg Glu Pro Val Phe Gln Arg Pro Arg Val Arg Tyr Gly Lys
      40           45           50           55
gcc aaa gct ccc atc caa gac atc tgg tac cac gag gat cgg att aga      247
Ala Lys Ala Pro Ile Gln Asp Ile Trp Tyr His Glu Asp Arg Ile Arg
      60           65           70
gcg aag ttt tat tca gtg tat ggg tct ggt caa aga gct ttt gat cta      295
Ala Lys Phe Tyr Ser Val Tyr Gly Ser Gly Gln Arg Ala Phe Asp Leu
      75           80           85
ttc aat cca aac ttc aag tct acc tgt caa cgg ttt gtg gag aag tac      343
Phe Asn Pro Asn Phe Lys Ser Thr Cys Gln Arg Phe Val Glu Lys Tyr
      90           95           100
act gag cta cag aaa ctt gga gaa aca gat gaa gag aag tta ttt gtg      391
Thr Glu Leu Gln Lys Leu Gly Glu Thr Asp Glu Glu Lys Leu Phe Val
      105           110           115
gaa aca ggg aag gct tta ttg gca gaa ggt gtc awt tta aga cgg      436
Glu Thr Gly Lys Ala Leu Leu Ala Glu Gly Val Xaa Leu Arg Arg
      120           125           130
taggcgacaa ggrctcmaca cgaggtagtc acgtttcc      474

```

<210> 3994  
<211> 556  
<212> DNA  
<213> Homo sapiens

<220>  
<221> CDS  
<222> 157..510

<400> 3994

```

ccacccttaa gaaaggagac agaaccacat catgaacttg atctgcaact ggaatatgga      60
caaggacaca ggggcattgg tttagttttg gtctctgtgt acttattttcc ttcagatgcc      120
cgaggaaaga gaaaaagtag agaagcagca gcmgcg atg gac gtg ttc ctc atg      174
                               Met Asp Val Phe Leu Met
                               1           5
atc cgg cgc cac aag acc acc atc ttc acg gac gcc aag gag tcc agc      222
Ile Arg Arg His Lys Thr Thr Ile Phe Thr Asp Ala Lys Glu Ser Ser
      10           15           20
acg gtg ttc gaa ctg aag cgc atc gtc gag ggc atc ctc aag cgg cct      270

```



Thr Val Phe Glu Leu Lys Arg Ile Val Glu Gly Ile Leu Lys Arg Pro  
 25 30 35  
 cct gac gag cag cgg ctg tac aag gat gac caa ctc ttg gat gat ggc 318  
 Pro Asp Glu Gln Arg Leu Tyr Lys Asp Asp Gln Leu Leu Asp Asp Gly  
 40 45 50  
 aag aca ctg ggc gag tgt ggc ttc acc agt caa aca gca cgg cca cag 366  
 Lys Thr Leu Gly Glu Cys Gly Phe Thr Ser Gln Thr Ala Arg Pro Gln  
 55 60 65 70  
 gcc cca gcc aca gtg ggg ctg gcc ttc cgg gca gat gac acc ttt gag 414  
 Ala Pro Ala Thr Val Gly Leu Ala Phe Arg Ala Asp Asp Thr Phe Glu  
 75 80 85  
 gcc ctg tgc atc gag ccg ttt tcc agc ccg cca gag ctg ccc gat gtg 462  
 Ala Leu Cys Ile Glu Pro Phe Ser Ser Pro Pro Glu Leu Pro Asp Val  
 90 95 100  
 atg aag ccc cag gac tcg gga agc agt gcc aat gaa caa gcc gtg cag 510  
 Met Lys Pro Gln Asp Ser Gly Ser Ser Ala Asn Glu Gln Ala Val Gln  
 105 110 115  
 tgagaccccc aagaggccca tttcccccaa taaaagagat ttggga 556  
  
 <210> 3995  
 <211> 444  
 <212> DNA  
 <213> Homo sapiens  
  
 <220>  
 <221> CDS  
 <222> 45..398  
  
 <400> 3995  
 gagcgcggct gcgcggcgcg tcgaggggag aggcagcagc cgcg atg gac gtg ttc 56  
 Met Asp Val Phe  
 1  
 ctc atg atc cgg cgc cac aag acc acc atc ttc acg gac gcc aag gag 104  
 Leu Met Ile Arg Arg His Lys Thr Thr Ile Phe Thr Asp Ala Lys Glu  
 5 10 15 20  
 tcc agc acg gtg ttc gaa ctg aag cgc atc gtc gag ggc atc ctc aag 152  
 Ser Ser Thr Val Phe Glu Leu Lys Arg Ile Val Glu Gly Ile Leu Lys  
 25 30 35  
 cgg cct cct gac gag cag cgg ctg tac aag gat gac caa ctc ttg gat 200  
 Arg Pro Pro Asp Glu Gln Arg Leu Tyr Lys Asp Asp Gln Leu Leu Asp  
 40 45 50  
 gat ggc aag aca ctg ggc gag tgt ggc ttc acc agt caa aca gca cgg 248  
 Asp Gly Lys Thr Leu Gly Glu Cys Gly Phe Thr Ser Gln Thr Ala Arg  
 55 60 65  
 cca cag gcc cca gcc aca gtg ggg ctg gcc ttc cgg gca gat gac acc 296  
 Pro Gln Ala Pro Ala Thr Val Gly Leu Ala Phe Arg Ala Asp Asp Thr  
 70 75 80  
 ttt gag gcc ctg tgc atc gag ccg ttt tcc agc ccg cca gag ctg ccc 344  
 Phe Glu Ala Leu Cys Ile Glu Pro Phe Ser Ser Pro Pro Glu Leu Pro  
 85 90 95 100  
 gat gtg atg aag ccc cag gac tcg gga agc agt gcc aat gaa caa gcc 392  
 Asp Val Met Lys Pro Gln Asp Ser Gly Ser Ser Ala Asn Glu Gln Ala  
 105 110 115

gtg cag tgagaccccc aagaggccca tttccccaa taaaagagat ttggga 444  
Val Gln

<210> 3996  
<211> 466  
<212> DNA  
<213> Homo sapiens

<220>  
<221> CDS  
<222> 108..437

<400> 3996  
acagctgctg gtctgcggga ataggtgcag cgggcccttg gcgggggact ctgagggagg 60  
agctggggac ggcgacccta ggagagttct ttgggggtgac tttcaag atg gac tct 116  
Met Asp Ser

act cta aca gca agt gaa atc cgg cag cga ttt ata gat ttc ttc aag 164  
Thr Leu Thr Ala Ser Glu Ile Arg Gln Arg Phe Ile Asp Phe Phe Lys  
5 10 15

agg aac gag cat acg tat gtt cac tcg tct gcc acc atc cca ttg gat 212  
Arg Asn Glu His Thr Tyr Val His Ser Ser Ala Thr Ile Pro Leu Asp  
20 25 30 35

gac ccc act ttg ctc ttt gcc aat gca ggc atg aac cag ttt aaa ccc 260  
Asp Pro Thr Leu Leu Phe Ala Asn Ala Gly Met Asn Gln Phe Lys Pro  
40 45 50

att ttc ctg aac aca att gac cca tct cac ccc atg gca aag ctg agc 308  
Ile Phe Leu Asn Thr Ile Asp Pro Ser His Pro Met Ala Lys Leu Ser  
55 60 65

aga gct gcc aat acc cag aag tgc atc cgg gct ggg ggc aaa cat aat 356  
Arg Ala Ala Asn Thr Gln Lys Cys Ile Arg Ala Gly Gly Lys His Asn  
70 75 80

gac ctg gac gat gtg ggc aag gat gtc tat cat cac acc ttc ttc gag 404  
Asp Leu Asp Asp Val Gly Lys Asp Val Tyr His His Thr Phe Phe Glu  
85 90 95

atg ctg ggc tca ttg gtc ttt tgg aga tta ctt taaggaattg gcatgtaaga 457  
Met Leu Gly Ser Leu Val Phe Trp Arg Leu Leu  
100 105 110

tggctctgg 466

<210> 3997  
<211> 570  
<212> DNA  
<213> Homo sapiens

<220>  
<221> CDS  
<222> 68..502

<400> 3997  
taaagaaaaa gcmagttctt tgatcagttt actcaaacag gaagggatag ccacaagtga 60  
caacttc atg cag gct ttc ctg aat gta ttg gac cak tgt ccc aaa ctg 109

	Met	Gln	Ala	Phe	Leu	Asn	Val	Leu	Asp	Xaa	Cys	Pro	Lys	Leu	
	1				5				10						
gag gtt gac atc cct ttg gtg aaa tcc tat tta gca cag ttt gca gct															157
Glu Val Asp Ile Pro Leu Val Lys Ser Tyr Leu Ala Gln Phe Ala Ala															
15				20					25				30		
cgt gcc atc att tca gag ctg gtg agc att tca gaa cta gct caa cca															205
Arg Ala Ile Ile Ser Glu Leu Val Ser Ile Ser Glu Leu Ala Gln Pro				35				40					45		
cta gaa agt ggc acc cat ttt cct ctc ttc cta ctt tgt ctt cag cag															253
Leu Glu Ser Gly Thr His Phe Pro Leu Phe Leu Leu Cys Leu Gln Gln				50			55					60			
tta gct aaa tta caa gat cga gaa tgg tta aca gaa ctt ttt caa caa															301
Leu Ala Lys Leu Gln Asp Arg Glu Trp Leu Thr Glu Leu Phe Gln Gln				65		70			75						
agc aag gtc aat atg cag aaa atg ctc cca gaa att gat cag aat aag															349
Ser Lys Val Asn Met Gln Lys Met Leu Pro Glu Ile Asp Gln Asn Lys				80		85		90							
gac cgc atg ttg gag att ttg gaa gga aag gga ctg agt ttc tta ttc															397
Asp Arg Met Leu Glu Ile Leu Glu Gly Lys Gly Leu Ser Phe Leu Phe				95		100		105					110		
cca mtc ctc aaa ttg gag aag gaa ctg ttg aag caa ata aag ttg gat															445
Pro Xaa Leu Lys Leu Glu Lys Glu Leu Leu Lys Gln Ile Lys Leu Asp				115		120		125							
cca tcc cct caa acc ata tat aaa tgg att aaa gat aac atc tct ccc															493
Pro Ser Pro Gln Thr Ile Tyr Lys Trp Ile Lys Asp Asn Ile Ser Pro				130		135		140							
aaa ctc atg tagataaagg atttgtgaac atcttaatga ctagcttctt															542
Lys Leu Met				145											
acagtacatt tctagtgaag taaacccc															570

<210> 3998  
 <211> 441  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 20..367

<400> 3998	
caccgaggtk ntcaagaac atg ggc tat gcc gcc aag gcc atg aag gcg gcc	52
Met Gly Tyr Ala Ala Lys Ala Met Lys Ala Ala	
1	5
cat gac aac atg gac atc gat aaa gtt gat gag tta atg cag gac att	100
His Asp Asn Met Asp Ile Asp Lys Val Asp Glu Leu Met Gln Asp Ile	
15	20
gct gac cag aaw gaa ctt gca gag gag att tca aca gca att tcg aaa	148
Ala Asp Gln Xaa Glu Leu Ala Glu Glu Ile Ser Thr Ala Ile Ser Lys	
30	35
cct gta ggg ttt gga gaa gag ttt gac gag gat gag ctc atg gcg gaa	196
Pro Val Gly Phe Gly Glu Glu Phe Asp Glu Asp Glu Leu Met Ala Glu	
45	50
	55

tta gaa gaa cta gaa cag gag gaa cta gac aag aat ttg ctg gaa atc	244
Leu Glu Glu Leu Glu Gln Glu Glu Leu Asp Lys Asn Leu Leu Glu Ile	
60 65 70 75	
agt gga ccc gaa aca gtc cct cta cca aat gtt ccc tct ata gcc cta	292
Ser Gly Pro Glu Thr Val Pro Leu Pro Asn Val Pro Ser Ile Ala Leu	
80 85 90	
cca tca aaa ccc gcc aag aag aaa gaa gag gag gac gac gac atg aag	340
Pro Ser Lys Pro Ala Lys Lys Lys Glu Glu Glu Asp Asp Asp Met Lys	
95 100 105	
gaa ttg gag aac tgg gct gga tcc atg taatgggggc cagcgctggc	387
Glu Leu Glu Asn Trp Ala Gly Ser Met	
110 115	
tgggcccaga cagactgtgg tggcctgcgc acgagcaggc gtgtgcgtgt gcgg	441
 <210> 3999	
<211> 468	
<212> DNA	
<213> Homo sapiens	
 <220>	
<221> CDS	
<222> 107..418	
 <400> 3999	
agaagtgggtt ctcatctttt ttgcagctt aagatctgcc ttggtatttg aagagatata	60
aactagatca atttctttca caggatcaac taaacagtgt accaca atg aat tct	115
Met Asn Ser	
1	
gaa ctt gac tat tat gan aag ttt gra gaa gtc cat ggg att cta atg	163
Glu Leu Asp Tyr Tyr Xaa Lys Phe Xaa Glu Val His Gly Ile Leu Met	
5 10 15	
tat aaa gat ttt gtc aaa tat tgg gat aat gtg gaa gcg ttc cag gca	211
Tyr Lys Asp Phe Val Lys Tyr Trp Asp Asn Val Glu Ala Phe Gln Ala	
20 25 30 35	
aga cca gat gat ctt gtc att gcc acc tac cct aaa tct ggt aca acc	259
Arg Pro Asp Asp Leu Val Ile Ala Thr Tyr Pro Lys Ser Gly Thr Thr	
40 45 50	
tgg gtt agt gaa att gtg tat atg atc tat aaa gag ggt gat gtg gaa	307
Trp Val Ser Glu Ile Val Tyr Met Ile Tyr Lys Glu Gly Asp Val Glu	
55 60 65	
aag tgc aaa gaa gat gta att ttt aat cga ata cct ttc ctg gaa tgc	355
Lys Cys Lys Glu Asp Val Ile Phe Asn Arg Ile Pro Phe Leu Glu Cys	
70 75 80	
aga aaa gaa aac ctc atg aat ggt aac gtt caa gtt gat ttt aaa aac	403
Arg Lys Glu Asn Leu Met Asn Gly Asn Val Gln Val Asp Phe Lys Asn	
85 90 95	
tat ttg cat ata ttc taagggtgtgt atgtacatgg tacaagcaat gagattataa	458
Tyr Leu His Ile Phe	
100	
gcaagaatgg	468
 <210> 4000	
<211> 532	

<212> DNA  
<213> Homo sapiens

<220>  
<221> CDS  
<222> 138..473

<400> 4000  
 aaaatggcgc agrgcagggg rgggctcttc acccagtcgc gcagttgaag ctcggcgctc 60  
 ggggttaccctc tgcagcgacg ccccttggtc ccacagatac cactgctgct cccgccttt 120  
 cgctcctcgg ccgcgcga atg ggc acc cgc gac gac gag tac gac tac ctc 170  
 Met Gly Thr Arg Asp Asp Glu Tyr Asp Tyr Leu  
 1 5 10  
 ttt aaa gtt gtc ctt att gga gat tct ggt gtt gga aag agt aat ctc 218  
 Phe Lys Val Val Leu Ile Gly Asp Ser Gly Val Gly Lys Ser Asn Leu  
 15 20 25  
 ctg tct cga ttt act cga aat gag ttt aat ctg gaa agc aag agc acc 266  
 Leu Ser Arg Phe Thr Arg Asn Glu Phe Asn Leu Glu Ser Lys Ser Thr  
 30 35 40  
 att gga gta gag ttt gca aca aga agc atc cag gtt gat gga aaa aca 314  
 Ile Gly Val Glu Phe Ala Thr Arg Ser Ile Gln Val Asp Gly Lys Thr  
 45 50 55  
 ata aag gca cag ata tgg gac aca gca ggg caa gag cga tat cga gct 362  
 Ile Lys Ala Gln Ile Trp Asp Thr Ala Gly Gln Glu Arg Tyr Arg Ala  
 60 65 70 75  
 ata aca tca gca tat tat cgt gga gct gta ggt gcc tta ttg gtt tat 410  
 Ile Thr Ser Ala Tyr Tyr Arg Gly Ala Val Gly Ala Leu Leu Val Tyr  
 80 85 90  
 gac att gct aaa cat ctc aca tat gaa aat gta gag cga tct gaa aga 458  
 Asp Ile Ala Lys His Leu Thr Tyr Glu Asn Val Glu Arg Ser Glu Arg  
 95 100 105  
 act gag aga tca tgc tgaagtaaca ttgttatcat gcttgtgggc aataagagtg 513  
 Thr Glu Arg Ser Cys  
 110  
 atctacgtca tctcagggc 532

<210> 4001  
<211> 471  
<212> DNA  
<213> Homo sapiens

<220>  
<221> CDS  
<222> 33..374

<400> 4001  
 actgaccctg ctctctcctt tccctgtag ac atg ggc act cca cag aag gat 53  
 Met Gly Thr Pro Gln Lys Asp  
 1 5  
 gtt att atc aag tca gat gca ccg gac act ttg tta ttg gag aaa cat 101  
 Val Ile Ile Lys Ser Asp Ala Pro Asp Thr Leu Leu Leu Glu Lys His  
 10 15 20

gca gat tat atc gca tcc tat ggc tca aag aaa gat gat tat gaa tac 149  
 Ala Asp Tyr Ile Ala Ser Tyr Gly Ser Lys Lys Asp Asp Tyr Glu Tyr  
 25 30 35  
 tgt atg tct gag tat ttg aga atg agt ggc atc tat tgg ggt ctg aca 197  
 Cys Met Ser Glu Tyr Leu Arg Met Ser Gly Ile Tyr Trp Gly Leu Thr  
 40 45 50 55  
 gta atg gat ctc atg gga cwa ctt cat cgc atg aat aga gaa gag att 245  
 Val Met Asp Leu Met Gly Xaa Leu His Arg Met Asn Arg Glu Glu Ile  
 60 65 70  
 ctg gca ttt att arg tct tgc caa cat gaa tgt ggt gga ata agt gct 293  
 Leu Ala Phe Ile Xaa Ser Cys Gln His Glu Cys Gly Gly Ile Ser Ala  
 75 80 85  
 agt atc gga cat gat ccw mat ctt tta tac act ctt agt gct gtc cag 341  
 Ser Ile Gly His Asp Pro Xaa Leu Leu Tyr Thr Leu Ser Ala Val Gln  
 90 95 100  
 att ctt acg ctg tat gac agt akt ann tgt tat tgacgtaaat gagttgtgga 394  
 Ile Leu Thr Leu Tyr Asp Ser Xaa Xaa Cys Tyr  
 105 110  
 atatgntaaa ggtctacaga aagaagatgg ttcttttgct ggagatattt ggggtccact 454  
 aagcagctgg tctaact 471

<210> 4002  
 <211> 450  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 21..443

<400> 4002  
 gcactagagg cgacctaaac atg gag aca gcg ggc gct gca act ggg cag ccg 53  
 Met Glu Thr Ala Gly Ala Ala Thr Gly Gln Pro  
 1 5 10  
 gcc tct ggg ctg gag gct ccg ggg tcc acg aat gac cgg ctt ttc ctg 101  
 Ala Ser Gly Leu Glu Ala Pro Gly Ser Thr Asn Asp Arg Leu Phe Leu  
 15 20 25  
 gtt aaa ggt gga att ttc ctt ggt acc gtt gct gca gcg gga atg cta 149  
 Val Lys Gly Gly Ile Phe Leu Gly Thr Val Ala Ala Ala Gly Met Leu  
 30 35 40  
 gct gga ttt att aca aca tta tca ttg gct aaa aag aaa agc cct gaa 197  
 Ala Gly Phe Ile Thr Thr Leu Ser Leu Ala Lys Lys Lys Ser Pro Glu  
 45 50 55  
 tgg ttc aat aag gga agt atg gcc acg gct gca tta ccg gaa agc ggg 245  
 Trp Phe Asn Lys Gly Ser Met Ala Thr Ala Ala Leu Pro Glu Ser Gly  
 60 65 70 75  
 tct tcc ctt gcc ttg cga gct ctg ggc tgg ggc tcc ctg tat gca tgg 293  
 Ser Ser Leu Ala Leu Arg Ala Leu Gly Trp Gly Ser Leu Tyr Ala Trp  
 80 85 90  
 tgt ggg gtt gyn gtg att agc ttc gca gtc tgg aaa gct tta gga gtt 341  
 Cys Gly Val Xaa Val Ile Ser Phe Ala Val Trp Lys Ala Leu Gly Val  
 95 100 105  
 cac agt atg aac gac ttt cga agt aaa atg caa tca ata ttt cca aca 389

His Ser Met Asn Asp Phe Arg Ser Lys Met Gln Ser Ile Phe Pro Thr  
 110 115 120  
 att ccc aag rac tcc gaa tcg gct gtt gag tgg gag gaa aca ttg aaa 437  
 Ile Pro Lys Xaa Ser Glu Ser Ala Val Glu Trp Glu Glu Thr Leu Lys  
 125 130 135  
 tcc aaa tgagatg 450  
 Ser Lys  
 140

<210> 4003  
 <211> 495  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 94..480

<400> 4003  
 acttcccacg cgacttcctg cgggaaacat ggcggcattg agcggagtcc gctggctgac 60  
 ccgagcgctg gtctccgcgc ggaaccctgg ggc atg gag agg tct gag tac ctc 114  
 Met Glu Arg Ser Glu Tyr Leu  
 1 5  
 ggc cgc ggc gca cgc tgc atc gcg gas cag gcc gag gac gtg agg gtg 162  
 Gly Arg Gly Ala Arg Cys Ile Ala Xaa Gln Ala Glu Asp Val Arg Val  
 10 15 20  
 gag ggc tcc ttt ccc gtg acc atg ctt ccg gga gac ggt gtg ggg cct 210  
 Glu Gly Ser Phe Pro Val Thr Met Leu Pro Gly Asp Gly Val Gly Pro  
 25 30 35  
 gag ctg atg cac gcc gtc aag gag gtg ttc aag gct gcc gct gtc cca 258  
 Glu Leu Met His Ala Val Lys Glu Val Phe Lys Ala Ala Ala Val Pro  
 40 45 50 55  
 gtg gag ttc cag gag cac cac ctg agt gag gtg cag aat atg gca tct 306  
 Val Glu Phe Gln Glu His His Leu Ser Glu Val Gln Asn Met Ala Ser  
 60 65 70  
 gag gag aag ctg gag cag gtg ctg agt tcc atg aag gag aac aaa gtg 354  
 Glu Glu Lys Leu Glu Gln Val Leu Ser Ser Met Lys Glu Asn Lys Val  
 75 80 85  
 gcc atc att gga aag att cat acc ccg atg gag tat arg ggg gcw nna 402  
 Ala Ile Ile Gly Lys Ile His Thr Pro Met Glu Tyr Xaa Gly Ala Xaa  
 90 95 100  
 rnc cnt cct atg ata tgc ggc tka ggc gta agt tgg act tat ttg cca 450  
 Xaa Xaa Pro Met Ile Cys Gly Xaa Gly Val Ser Trp Thr Tyr Leu Pro  
 105 110 115  
 cgt rtc cat gtg agt cac ttc ctg ggt ata tgactcggca cacat 495  
 Arg Xaa His Val Ser His Phe Leu Gly Ile  
 120 125

<210> 4004  
 <211> 479  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 30..347

<400> 4004

```

agtcagtgcg caaccgttcg ctaactgaa atg atg gcg act gga acg cca gag      53
                               Met Met Ala Thr Gly Thr Pro Glu
                               1      5
tct caa gcg cgg ttc ggt cag tcc gtg aag ggg ctt ctc acg gag aag      101
Ser Gln Ala Arg Phe Gly Gln Ser Val Lys Gly Leu Leu Thr Glu Lys
   10                15                20
gtg acc acc tgt ggt act gac gta atc gcg ctc acc aag cag gtg ctg      149
Val Thr Thr Cys Gly Thr Asp Val Ile Ala Leu Thr Lys Gln Val Leu
   25                30                35                40
aaa ggc tcc cgg agc tcc gag ctg cta ggt cag gca gct cga aac atg      197
Lys Gly Ser Arg Ser Ser Glu Leu Leu Gly Gln Ala Ala Arg Asn Met
                   45                50                55
gta ctc cag gaa gat gcc atc ttg cac tca gaa gat agt tta agg aag      245
Val Leu Gln Glu Asp Ala Ile Leu His Ser Glu Asp Ser Leu Arg Lys
                   60                65                70
atg gca ata ata aca aca cat ctt caa tac cag caa gaa gct att cag      293
Met Ala Ile Thr Thr His Leu Gln Tyr Gln Gln Glu Ala Ile Gln
                   75                80                85
aag aat gtt gaa cag tca tcg gat cta cag gac cag ttg aat cat ctg      341
Lys Asn Val Glu Gln Ser Ser Asp Leu Gln Asp Gln Leu Asn His Leu
                   90                95                100
ttg aaa tagaatgaca tgtaagagtg ctgtaggact cctttgccta atgctgagga      397
Leu Lys
105
gtaaatacct tacacagctg tcctctgggt ttggttttct atttwctyst ccaaaaagtta      457
agttagaaaa gttctgtgtt ag                                         479
  
```

<210> 4005  
 <211> 391  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 73..381

<400> 4005

```

acacagctgc mmggkactcc agtgatcgcc gcggetcgct cgcgccccgg aaactgcccc      60
ttctcggggg tc atg atg ggc agc aag atg gcg tct gct agt agg gtc gtt      111
           Met Met Gly Ser Lys Met Ala Ser Ala Ser Arg Val Val
           1      5                10
cag gta gtc aaa cca cac act cca tta ata agg ttt cct gac aga aga      159
Gln Val Val Lys Pro His Thr Pro Leu Ile Arg Phe Pro Asp Arg Arg
   15                20                25
gac aat cct aaa ccc aat gta tca gaa gct ttg aga tca gca ggg cta      207
Asp Asn Pro Lys Pro Asn Val Ser Glu Ala Leu Arg Ser Ala Gly Leu
   30                35                40                45
  
```



cca tct cac tct tct gta att tca caa cat tct aaa gga agt aaa tca	255
Pro Ser His Ser Ser Val Ile Ser Gln His Ser Lys Gly Ser Lys Ser	
50 55 60	
cca gat ttg ctg atg tat cag ggt cca cca gac act gca gaa ata ata	303
Pro Asp Leu Leu Met Tyr Gln Gly Pro Pro Asp Thr Ala Glu Ile Ile	
65 70 75	
aaa aca tta cct cag aaa tac aga agg aaa ctt gtg tct caa gaa gaa	351
Lys Thr Leu Pro Gln Lys Tyr Arg Arg Lys Leu Val Ser Gln Glu Glu	
80 85 90	
atg gaa ttt atc caa cgt gga ggt cct gaa taaccatggt	391
Met Glu Phe Ile Gln Arg Gly Gly Pro Glu	
95 100	

<210> 4006  
 <211> 463  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 74..379

<400> 4006	
ggctgcgcgt tgtgcgctgt cccagggttg aaaccagtgc cccaggcggc gaggagagcg	60
gtgccttgca ggg atg ctg cgg gcg gga gca cca acc ggg gac tta ccc	109
Met Leu Arg Ala Gly Ala Pro Thr Gly Asp Leu Pro	
1 5 10	
cgg gcg gga gaa gtc cac acc ggg acc acc atc atg gca gtg gag ttt	157
Arg Ala Gly Glu Val His Thr Gly Thr Thr Ile Met Ala Val Glu Phe	
15 20 25	
gac ggg ggc gtt gtg atg ggt tct gat tcc cga gtg tct gca ggc gag	205
Asp Gly Gly Val Val Met Gly Ser Asp Ser Arg Val Ser Ala Gly Glu	
30 35 40	
gcg gtg gtg aac cga gtg ttt gac aag ctg tcc ccg ctg cac gag crc	253
Ala Val Val Asn Arg Val Phe Asp Lys Leu Ser Pro Leu His Glu Xaa	
45 50 55 60	
atc tac tgt gca ctc tct ggt tca gct gct gat gcc caa gcc gtg gcc	301
Ile Tyr Cys Ala Leu Ser Gly Ser Ala Ala Asp Ala Gln Ala Val Ala	
65 70 75	
gac atg gcc gcc tac cag ctg gag ctc cat ggg ata gaa ctg gag gaa	349
Asp Met Ala Ala Tyr Gln Leu Glu Leu His Gly Ile Glu Leu Glu Glu	
80 85 90	
ctc cac ttg ttt tgg ctg ctg caa atg tgg tgagaaatat cagctataaa	399
Leu His Leu Phe Trp Leu Leu Gln Met Trp	
95 100	
tatcgagagg acttgtctgc acatctcatg gtagctggct gggaccaacg tgaaggaggt	459
cagg	463

<210> 4007  
 <211> 463  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 26..409

<400> 4007

gatttcgaag ttgcaccggt tgagg	atg gct gac att ctc tct cag tca gag	52
	Met Ala Asp Ile Leu Ser Gln Ser Glu	
	1 5	
acc ctg gcg tcg caa gac ctc agt ggg gac ttc aag aag cca gct ctg		100
Thr Leu Ala Ser Gln Asp Leu Ser Gly Asp Phe Lys Lys Pro Ala Leu		
10 15 20 25		
ccg gtg tcc cca gcg gcg cgg agt aag gcc ccg gcc agc agt tct tca		148
Pro Val Ser Pro Ala Ala Arg Ser Lys Ala Pro Ala Ser Ser Ser		
30 35 40		
aac cct gag gag gta cag aag gaa ggg ccc act gcg ttg cag gac tcc		196
Asn Pro Glu Glu Val Gln Lys Glu Gly Pro Thr Ala Leu Gln Asp Ser		
45 50 55		
aat tct ggg gag ccc gac atc cct cct cct cag ccg gac tgc ggt gat		244
Asn Ser Gly Glu Pro Asp Ile Pro Pro Pro Gln Pro Asp Cys Gly Asp		
60 65 70		
ttt agg agt cta cag gag gag cag tcg cgc ccc mcg aca gcg gtt tct		292
Phe Arg Ser Leu Gln Glu Glu Gln Ser Arg Pro Xaa Thr Ala Val Ser		
75 80 85		
tcc cct gcc ggt cca gcc cgg gct ccc ccc tac caa gag cct cca tgg		340
Ser Pro Gly Gly Pro Ala Arg Ala Pro Pro Tyr Gln Glu Pro Pro Trp		
90 95 100 105		
ggg gcc cct gcc aca gcc ccc tac agc tta gag acc ctg aag gcg gca		388
Gly Gly Pro Ala Thr Ala Pro Tyr Ser Leu Glu Thr Leu Lys Ala Ala		
110 115 120		
cta tcc ttg gya ccc gta gct tgaaagggac gagttactgc ttttcgggag		439
Leu Ser Leu Xaa Pro Val Ala		
125		
gctgtctggc tgcgacgtgt gctg		463

<210> 4008  
 <211> 359  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 1..333

<400> 4008

atg gag agg gac agg agg aaa cgc agc gcc agc agc atc tca tct acc	48
Met Glu Arg Asp Arg Arg Lys Arg Ser Ala Ser Ser Ile Ser Ser Thr	
1 5 10 15	
ctc ctt gac acc tcc ccg tgg ctc cag acc cta gag gtc agc ctt gcg	96
Leu Leu Asp Thr Ser Pro Trp Leu Gln Thr Leu Glu Val Ser Leu Ala	
20 25 30	
gac caa cag gag gac tcc cag ytt tcc ctt ttc aag agg tcc cca gac	144
Asp Gln Gln Glu Asp Ser Gln Xaa Ser Leu Phe Lys Arg Ser Pro Asp	

004220" 666E7560

35	40	45	
acc ggc cac cct ctt cca gcc cct gcg gcc agt gca agg agg cac caa			192
Thr Gly His Pro Leu Pro Ala Pro Ala Ala Ser Ala Arg Arg His Gln			
50	55	60	
tgc tct gag gct gtc gcg tgg tgc agc gtc gag cat cct cgc cga ggt			240
Cys Ser Glu Ala Val Ala Trp Cys Ser Val Glu His Pro Arg Arg Gly			
65	70	75	80
cct ttc tgc tgc ctg tcc cgc ctc acc ccg ctc cat cac acc agc tgg			288
Pro Phe Cys Cys Leu Ser Arg Leu Thr Pro Leu His His Thr Ser Trp			
85	90	95	
ccc tct ttg ctt cct ttt ccc aga atc gtt aag cns gac tcc cac			333
Pro Ser Leu Leu Pro Phe Pro Arg Ile Val Lys Xaa Asp Ser His			
100	105	110	
tagcacctcg taccaacctc gcccca			359

<210> 4009  
 <211> 563  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 170..493

<400> 4009	
actgtctccg agacgcttcc tgtccggtga gcgtcgaccg actgaaacgg cggcccataa	60
tgcattgcga tggcgggtag gcgtgtgggg gcggagccag ggccggaagt agagcggagg	120
tgggtggcggc ggaggctttg gcagctcggg actgagtgca agaatcagc atg att ctt	178
	Met Ile Leu
	1
cag agg ctc ttc agg ttc tcc tct gtc att cgg tca gcc gtc tca gtc	226
Gln Arg Leu Phe Arg Phe Ser Ser Val Ile Arg Ser Ala Val Ser Val	
5	10
cat ttg cgg agg aac att ggt gtt aca gca gtg gca ttt aat aag gaa	274
His Leu Arg Arg Asn Ile Gly Val Thr Ala Val Ala Phe Asn Lys Glu	
20	25
ctt gat cct ata cag aaa ctc ttt gtg gac aag att aga gaa tac aaa	322
Leu Asp Pro Ile Gln Lys Leu Phe Val Asp Lys Ile Arg Glu Tyr Lys	
40	45
tct aag cga cag aca tct gga gga cct gtt gat gct agt tca gag tat	370
Ser Lys Arg Gln Thr Ser Gly Gly Pro Val Asp Ala Ser Ser Glu Tyr	
55	60
cag caa gag ctg gag agg gag ctt ttt aag ctc aag caa atg ttt ggt	418
Gln Gln Glu Leu Glu Arg Glu Leu Phe Lys Leu Lys Gln Met Phe Gly	
70	75
aat gca gac atg aat aca ttt ccc acc ttc aaa ttt gaa gat ccc aaa	466
Asn Ala Asp Met Asn Thr Phe Pro Thr Phe Lys Phe Glu Asp Pro Lys	
85	90
ttt gaa gtc atc gaa aaa ccc cag gcc tgaagaaata aagtaaaatt	513
Phe Glu Val Ile Glu Lys Pro Gln Ala	
100	105
aatctggtaa tttgtcacgg attagttgta caactagtta gangtttcag	563

<210> 4010  
 <211> 461  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 80..433

<400> 4010  
 agaggaagtc ccgcctctct ctcctcaggc agcagcaacg cggaggaaac gggagtgaac 60  
 ggagagcgta gtgaccatc atg agc ctc ctc aac aag ccc aag agt gag atg 112  
 Met Ser Leu Leu Asn Lys Pro Lys Ser Glu Met  
 1 5 10  
 acc cca gag gag ctg cag aag cga gag gag gag gaa ttt aac acc ggt 160  
 Thr Pro Glu Glu Leu Gln Lys Arg Glu Glu Glu Glu Phe Asn Thr Gly  
 15 20 25  
 cca ctc tct gtg ctc aca cag tca gtc aag aac aat acc caa gtg ctc 208  
 Pro Leu Ser Val Leu Thr Gln Ser Val Lys Asn Asn Thr Gln Val Leu  
 30 35 40  
 atc aac tgc cgc aac aat aag aaa ctc ctg ggc cgc gtg aag gcc ttc 256  
 Ile Asn Cys Arg Asn Asn Lys Lys Leu Leu Gly Arg Val Lys Ala Phe  
 45 50 55  
 gat agg cac tgc aac atg gtg ctg gag aac gtg aag gag atg tgg act 304  
 Asp Arg His Cys Asn Met Val Leu Glu Asn Val Lys Glu Met Trp Thr  
 60 65 70 75  
 gag gta ccc aag agt ggc aag ggc aag aag aag tcc aag cca gtc aac 352  
 Glu Val Pro Lys Ser Gly Lys Gly Lys Lys Lys Ser Lys Pro Val Asn  
 80 85 90  
 aaa gac cgc tac atc tcc aag atg ttc ctg cgc ggg gac tca gtc atc 400  
 Lys Asp Arg Tyr Ile Ser Lys Met Phe Leu Arg Gly Asp Ser Val Ile  
 95 100 105  
 gtg gtc ctg cgg aac ccg ctc atc gcc ggc aag taggggccgc ctgtctgttg 453  
 Val Val Leu Arg Asn Pro Leu Ile Ala Gly Lys  
 110 115  
 acagaact 461

<210> 4011  
 <211> 526  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 81..434

<400> 4011  
 aaaaactagc cgaggagagc cagggagccg gagagatcgc gcgcctgccg ccgccggagc 60  
 ctgcgagccg agaccgagcc atg tgg cta gaa atc ctc ctc act tca gtg ctg 113  
 Met Trp Leu Glu Ile Leu Leu Thr Ser Val Leu  
 1 5 10  
 ggc ttt gcc atc tac tgg ttc atc tcc cgg gac aaa gag gaa act ttg 161

Gly	Phe	Ala	Ile	Tyr	Trp	Phe	Ile	Ser	Arg	Asp	Lys	Glu	Glu	Thr	Leu		
			15					20					25				
cca	ctt	gaa	gat	ggg	tgg	tgg	ggg	cca	ggc	acg	agg	tcc	gca	gcc	agg	209	
Pro	Leu	Glu	Asp	Gly	Trp	Trp	Gly	Pro	Gly	Thr	Arg	Ser	Ala	Ala	Arg		
		30					35					40					
gag	gac	gac	agc	atc	cgc	cct	ttc	aag	gtg	gaa	acg	tca	gat	gag	gag	257	
Glu	Asp	Asp	Ser	Ile	Arg	Pro	Phe	Lys	Val	Glu	Thr	Ser	Asp	Glu	Glu		
	45					50					55						
atc	cac	gac	tta	cac	cag	agg	atc	gat	aag	ttc	cgt	ttc	acc	cca	cct	305	
Ile	His	Asp	Leu	His	Gln	Arg	Ile	Asp	Lys	Phe	Arg	Phe	Thr	Pro	Pro		
60					65					70					75		
ttg	gag	gac	agc	tgc	ttc	cac	tat	ggc	ttc	aac	tcc	aac	tac	ctg	aag	353	
Leu	Glu	Asp	Ser	Cys	Phe	His	Tyr	Gly	Phe	Asn	Ser	Asn	Tyr	Leu	Lys		
			80						85				90				
aaa	gtc	atc	tcc	tac	tgg	cgg	aat	gaa	ttt	gac	tgg	aag	aag	cag	gtg	401	
Lys	Val	Ile	Ser	Tyr	Trp	Arg	Asn	Glu	Phe	Asp	Trp	Lys	Lys	Gln	Val		
		95						100					105				
gaa	gat	tct	caa	cag	ata	ccc	tca	ctt	caa	gac	taagattgaa	gggctggaca				454	
Glu	Asp	Ser	Gln	Gln	Ile	Pro	Ser	Leu	Gln	Asp							
		110				115											
tccacttcat	ccacgtgaag	cccccccagc	tgcygcgcagc	cataccccga	agcccttrct											514	
gatggtgcac	gg															526	
<210> 4012																	
<211> 454																	
<212> DNA																	
<213> Homo sapiens																	
<220>																	
<221> CDS																	
<222> 57..413																	
<400> 4012																	
gaagagggggc	gcaagctcat	tgcgttttga	gtctcgggac	ccctgtttgga	gagact	atg										59	
						Met											
						1											
gcg	ctc	aac	aag	aat	cac	tgc	gag	ggc	ggc	gga	gtg	atc	gtc	aat	aac	107	
Ala	Leu	Asn	Lys	Asn	His	Ser	Glu	Gly	Gly	Gly	Val	Ile	Val	Asn	Asn		
		5						10					15				
acc	gag	agc	atc	cta	atg	tcc	tat	gat	cac	gtg	gaa	ctc	aca	ttc	aat	155	
Thr	Glu	Ser	Ile	Leu	Met	Ser	Tyr	Asp	His	Val	Glu	Leu	Thr	Phe	Asn		
		20				25						30					
gac	atg	aag	aac	gtg	cca	gaa	gcc	ttc	aaa	ggg	acc	aag	aaa	ggc	act	203	
Asp	Met	Lys	Asn	Val	Pro	Glu	Ala	Phe	Lys	Gly	Thr	Lys	Lys	Gly	Thr		
	35				40					45							
gtc	tac	ctt	acc	cct	tac	cgg	gtc	atc	ttt	ctg	tcc	aag	ggc	aag	gat	251	
Val	Tyr	Leu	Thr	Pro	Tyr	Arg	Val	Ile	Phe	Leu	Ser	Lys	Gly	Lys	Asp		
	50			55				60						65			
gcc	atg	cag	tcc	ttc	atg	atg	cca	ttt	tat	ctc	atg	aaa	gac	tgt	gag	299	
Ala	Met	Gln	Ser	Phe	Met	Met	Pro	Phe	Tyr	Leu	Met	Lys	Asp	Cys	Glu		
			70					75					80				
atc	aag	cag	ccc	gta	ttt	ggt	gca	aac	tac	atc	aag	gga	aca	gtg	aag	347	
Ile	Lys	Gln	Pro	Val	Phe	Gly	Ala	Asn	Tyr	Ile	Lys	Gly	Thr	Val	Lys		

85	90	95	
gcg gaa gcg gga ggt ggc tgg gaa ggc tct gct tcc tac aag ttg act			395
Ala Glu Ala Gly Gly Gly Trp Glu Gly Ser Ala Ser Tyr Lys Leu Thr			
100	105	110	
ttc acg gca ggg cgc cat tgagttcggg cagcggatgc tccaggtggc			443
Phe Thr Ala Gly Arg His			
115			
atctcaagcc t			454

<210> 4013  
 <211> 465  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 62..388

<400> 4013	
ctaaggggag gastccgtgg aaaccggaag taactcttga cgggcactcg gagcagttcc	60
g atg act gtc cac aac ctg tac ctg ttt gac cgg aat gga gtg tgt ctg	109
Met Thr Val His Asn Leu Tyr Leu Phe Asp Arg Asn Gly Val Cys Leu	
1 5 10 15	
cac tac agc gaa tgg cac cgc aag aag caa gca ggg att ccc aag gag	157
His Tyr Ser Glu Trp His Arg Lys Lys Gln Ala Gly Ile Pro Lys Glu	
20 25 30	
gag gag tat aag ctg atg tac ggg atg ctc ttc tct atc cgc tcg ttt	205
Glu Glu Tyr Lys Leu Met Tyr Gly Met Leu Phe Ser Ile Arg Ser Phe	
35 40 45	
gtc agc aag atg tcc ccg cta gac atg aag gat ggc ttc ctg gcc ttc	253
Val Ser Lys Met Ser Pro Leu Asp Met Lys Asp Gly Phe Leu Ala Phe	
50 55 60	
caa act agc cgt tac aaa ctc cat tac tac gag acg ccc act ggg atc	301
Gln Thr Ser Arg Tyr Lys Leu His Tyr Tyr Glu Thr Pro Thr Gly Ile	
65 70 75 80	
aaa gtt gtc atg aat act gac ttg ggc gtg gga ccc atc cga gat gtg	349
Lys Val Val Met Asn Thr Asp Leu Gly Val Gly Pro Ile Arg Asp Val	
85 90 95	
ctg cac cac atc tac agt gcg ctg ytg tgg agc tgg tgg tgaagaatcc	398
Leu His His Ile Tyr Ser Ala Leu Leu Trp Ser Trp Trp	
100 105	
cctgtgcccg ctgggcaaaa ctgtgcaaag tgagctcttt cgctcccgac tggactccta	458
tggtcgc	465

<210> 4014  
 <211> 574  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 172..537

&lt;400&gt; 4014

ctaaggggcg gastccgtgg aaaccggaag taactcttga cgggcactcg gagcagttcc 60  
 ggtgagtcgg tgggtggggg cccacactgg ttggaaggct gtgggtccgg gaaccgagc 120  
 ccaaggagtg ggggcggccc cggagcgagg ctacactcc ctgccctgca g atg act 177  
 Met Thr

1  
 gtc cac aac ctg tac ctg ttt gac cgg aat gga gtg tgt ctg cac tac 225  
 Val His Asn Leu Tyr Leu Phe Asp Arg Asn Gly Val Cys Leu His Tyr  
 5 10 15  
 agc gaa tgg cac cgc aag aag caa gca ggg att ccc aag gag gag gag 273  
 Ser Glu Trp His Arg Lys Lys Gln Ala Gly Ile Pro Lys Glu Glu Glu  
 20 25 30  
 tat aag ctg atg tac ggg atg ctc ttc tct atc cgc tgc ttt gtc agc 321  
 Tyr Lys Leu Met Tyr Gly Met Leu Phe Ser Ile Arg Ser Phe Val Ser  
 35 40 45 50  
 aag atg tcc ccg cta gac atg aag gat ggc ttc ctg gcc ttc caa act 369  
 Lys Met Ser Pro Leu Asp Met Lys Asp Gly Phe Leu Ala Phe Gln Thr  
 55 60 65  
 agc cgt tac aaa ctc cat tac tac gag acg ccc act ggg atc aaa gtt 417  
 Ser Arg Tyr Lys Leu His Tyr Tyr Glu Thr Pro Thr Gly Ile Lys Val  
 70 75 80  
 gtc atg aat act grc ttg ggc gtg gga cca tcc gag atg tgc tgc amc 465  
 Val Met Asn Thr Xaa Leu Gly Val Gly Pro Ser Glu Met Cys Cys Xaa  
 85 90 95  
 aca tct aca gtg cgc tgt tgt gga gct ggt ggt gaa gaa tcc cct gtg 513  
 Thr Ser Thr Val Arg Cys Cys Gly Ala Gly Gly Glu Glu Ser Pro Val  
 100 105 110  
 ccc gct ggg cca aac tgt gca aag tgagctcttt cgctcccgac tggactccta 567  
 Pro Ala Gly Pro Asn Cys Ala Lys  
 115 120  
 tgttcgc 574

&lt;210&gt; 4015

&lt;211&gt; 426

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; 54..410

&lt;400&gt; 4015

ccctgcctt cctctttccg tctcaggtcg ccgctgcgaa gggagccgcc gcc atg 56  
 Met  
 1  
 tct gcg cat ctg caa tgg atg gtc gtg cgg aac tgc tcc agt ttc ctg 104  
 Ser Ala His Leu Gln Trp Met Val Val Arg Asn Cys Ser Ser Phe Leu  
 5 10 15  
 atc aag agg aat aag cag acc tac agc act gag ccc aat aac ttg aag 152  
 Ile Lys Arg Asn Lys Gln Thr Tyr Ser Thr Glu Pro Asn Asn Leu Lys  
 20 25 30  
 gcc cgc aat tcc ttc cgc tac aac gga ctg att cac cgc aag act gtg 200

Ala	Arg	Asn	Ser	Phe	Arg	Tyr	Asn	Gly	Leu	Ile	His	Arg	Lys	Thr	Val	
35						40				45						
ggc	gtg	gag	ccg	gca	gcc	gac	ggc	aaa	ggt	gtc	gtg	gtg	gtc	att	aag	248
Gly	Val	Glu	Pro	Ala	Ala	Asp	Gly	Lys	Gly	Val	Val	Val	Val	Ile	Lys	
50					55				60					65		
cgg	aga	tcc	ggc	cag	cgg	aag	cct	gcc	acc	tcc	tat	gtg	cgg	acc	acc	296
Arg	Arg	Ser	Gly	Gln	Arg	Lys	Pro	Ala	Thr	Ser	Tyr	Val	Arg	Thr	Thr	
				70					75					80		
atc	aac	aag	aat	gct	cgc	gcc	acg	ctc	agc	agc	atc	aga	cac	atg	atc	344
Ile	Asn	Lys	Asn	Ala	Arg	Ala	Thr	Leu	Ser	Ser	Ile	Arg	His	Met	Ile	
			85					90					95			
cgc	aag	aac	aag	tac	cgc	ccc	gac	ctg	cgc	atg	ctt	trc	ggg	aaa	ggg	392
Arg	Lys	Asn	Lys	Tyr	Arg	Pro	Asp	Leu	Arg	Met	Leu	Xaa	Gly	Lys	Gly	
		100					105					110				
ttg	gra	rgm	agc	agg	ctg	taagcagcct	ggagca									426
Leu	Xaa	Xaa	Ser	Arg	Leu											
115																

<210> 4016  
 <211> 494  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 54..485

<400> 4016																
ccctgcgctt	cctctttccg	tctcaggtcg	ccgctgcgra	gggagccgcc	gcc	atg										56
						Met										
						1										
tct	gcg	cat	ctg	caa	tgg	atg	gtc	gtg	cgg	aac	tgc	tcc	agt	ttc	ctg	104
Ser	Ala	His	Leu	Gln	Trp	Met	Val	Val	Arg	Asn	Cys	Ser	Ser	Phe	Leu	
			5				10						15			
atc	aag	agg	aat	aag	cag	acc	tac	agc	act	gag	ccc	aat	aac	ttg	aag	152
Ile	Lys	Arg	Asn	Lys	Gln	Thr	Tyr	Ser	Thr	Glu	Pro	Asn	Asn	Leu	Lys	
		20				25						30				
gcc	cgc	aat	tcc	ttc	cgc	tac	aac	gga	ctg	att	cac	cgc	aag	act	gtg	200
Ala	Arg	Asn	Ser	Phe	Arg	Tyr	Asn	Gly	Leu	Ile	His	Arg	Lys	Thr	Val	
		35				40					45					
ggc	gtg	gag	ccg	gca	gcc	gac	ggc	aaa	ggt	gtc	gtg	gtg	gtc	att	aag	248
Gly	Val	Glu	Pro	Ala	Ala	Asp	Gly	Lys	Gly	Val	Val	Val	Val	Ile	Lys	
50					55				60					65		
cgg	aga	tcc	ggc	cag	cgg	aag	cct	gcc	acc	tcc	tat	gtg	cgg	acc	acc	296
Arg	Arg	Ser	Gly	Gln	Arg	Lys	Pro	Ala	Thr	Ser	Tyr	Val	Arg	Thr	Thr	
			70						75					80		
atc	aac	aag	aat	gct	cgc	gcc	acg	ctc	agc	agc	atc	aga	cac	atg	atc	344
Ile	Asn	Lys	Asn	Ala	Arg	Ala	Thr	Leu	Ser	Ser	Ile	Arg	His	Met	Ile	
			85					90					95			
cgc	aag	aac	aag	tac	cgc	ccc	gac	ctg	cgc	atg	gca	gcc	atc	cgc	agg	392
Arg	Lys	Asn	Lys	Tyr	Arg	Pro	Asp	Leu	Arg	Met	Ala	Ala	Ile	Arg	Arg	
		100					105					110				
cca	gcg	cca	tcc	tgc	gca	gca	gaa	gcc	tgt	gat	ggt	gaa	gag	gaa	gcg	440



Pro Ala Pro Ser Cys Ala Ala Glu Ala Cys Asp Gly Glu Glu Glu Ala  
 115 120 125  
 gac ccg ccc cac caa gag ctc ctg agc ccc ctg ccc cca gag caa 485  
 Asp Pro Pro His Gln Glu Leu Leu Ser Pro Leu Pro Pro Glu Gln  
 130 135 140  
 taaagtcag 494

<210> 4017  
 <211> 484  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 140..475

<400> 4017  
 acattttccc tgggtgagct ctcattttatt cctgcggatg cacacatacc ctgaccagtc 60  
 acagatctct acctccagct caggctcttc tcctgagctc cagccccacg tgtccaagtg 120  
 tctgctggga atctcctag atg ttg tgg gct aac tcc aac tca aac gga ctg 172  
 Met Leu Trp Ala Asn Ser Asn Ser Asn Gly Leu  
 1 5 10  
 att cac cgc aag act gtg ggc gtg gag ccg gma gcc gac ggc aaa ggt 220  
 Ile His Arg Lys Thr Val Gly Val Glu Pro Xaa Ala Asp Gly Lys Gly  
 15 20 25  
 gtc gtg gtg gtc awt aag cgg aga tcc ggc car gcg gaa gct ggv cam 268  
 Val Val Val Val Xaa Lys Arg Arg Ser Gly Gln Ala Glu Ala Gly Xaa  
 30 35 40  
 ctc cta tgt gcg gac cac cat caa caa gaa tgc tcg cgc cas gct cag 316  
 Leu Leu Cys Ala Asp His His Gln Gln Glu Cys Ser Arg Xaa Ala Gln  
 45 50 55  
 cag cat cag aca ntg atc cgc aag aac aag tac cgc ccc gac ctg cgc 364  
 Gln His Gln Thr Xaa Ile Arg Lys Asn Lys Tyr Arg Pro Asp Leu Arg  
 60 65 70 75  
 atg gca gcc atc cgc agg cca gcg cca tcc tgc gca gca gaa gcc tgt 412  
 Met Ala Ala Ile Arg Arg Pro Ala Pro Ser Cys Ala Ala Glu Ala Cys  
 80 85 90  
 gat ggt gaa gag gaa gcg gac ccg ccc cac caa gag ctc ctg agc ccc 460  
 Asp Gly Glu Glu Glu Ala Asp Pro Pro His Gln Glu Leu Leu Ser Pro  
 95 100 105  
 ctg ccc cca gag caa taaagtcag 484  
 Leu Pro Pro Glu Gln  
 110

<210> 4018  
 <211> 532  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 144..503

&lt;400&gt; 4018

```

caataccac agcatctaac taaatcctnn ggatttattc tccgggagaa attatccctt    60
tctaggaaaa tgaaagttat ttctgggtttt aattcataca atactttaag aaaatctgtt    120
aaatataaca aaacacaagc tag atg ctt aag aaa tgc tta aag aaa tat tgg    173
          Met Leu Lys Lys Cys Leu Lys Lys Tyr Trp
              1           5           10
ggc gaa ggt aac agc agt caa cag gat tgt ggc cat tac tgg tcc tat    221
Gly Glu Gly Asn Ser Ser Gln Gln Asp Cys Gly His Tyr Trp Ser Tyr
              15           20           25
tat ttt gat gta cca tgg aag gca cag aaa tcg agc aag gaa gat att    269
Tyr Phe Asp Val Pro Trp Lys Ala Gln Lys Ser Ser Lys Glu Asp Ile
              30           35           40
agt tat ttt gat cta cat ckt ttt cta aaa gaa aag tgg agc ttg cct    317
Ser Tyr Phe Asp Leu His Xaa Phe Leu Lys Glu Lys Trp Ser Leu Pro
              45           50           55
cca gtt caa ttc aca aga gca ttt tcc ctc cca tgc cca cct ttt ctt    365
Pro Val Gln Phe Thr Arg Ala Phe Ser Leu Pro Cys Pro Pro Phe Leu
              60           65           70
gtg gct gtc gct agg aag gat gca gag gct gtg tgg ttt acc aaa tgc    413
Val Ala Val Ala Arg Lys Asp Ala Glu Ala Val Trp Phe Thr Lys Cys
              75           80           85           90
ctt aac tta gca gtg aat gac aac tgt caa aca cat gtt gag gga ann    461
Leu Asn Leu Ala Val Asn Asp Asn Cys Gln Thr His Val Glu Gly Xaa
              95           100           105
ttt tta ctg att cac aaa aag gaa gac agt ttg ccc acc tck    503
Phe Leu Leu Ile His Lys Lys Glu Asp Ser Leu Pro Thr Ser
              110           115           120
tagtggcacr aatcraagct gcatgcact    532

```

&lt;210&gt; 4019

&lt;211&gt; 626

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; 131..571

&lt;400&gt; 4019

```

aggagcctgc gcatgcgctc tgccctggca gcggccctgt gcagatccct gagcgtgtgg    60
cagcagtgcg gtcgtggtcc ctccctatgc agcctgggtt ctagcgtgac acgcccttga    120
cttgaggacc atg aac cgc agc cgc cag gtg acg tgc gtg gcc tgg gtc    169
          Met Asn Arg Ser Arg Gln Val Thr Cys Val Ala Trp Val
              1           5           10
cgc tgc ggc gtg gcc aaa gag aca cca gac aag gta gag ctg agt aaa    217
Arg Cys Gly Val Ala Lys Glu Thr Pro Asp Lys Val Glu Leu Ser Lys
              15           20           25
gaa gaa gta aaa cgc ctc att gct gag gca aag gag aaa ttg caa gaa    265
Glu Glu Val Lys Arg Leu Ile Ala Glu Ala Lys Glu Lys Leu Gln Glu
              30           35           40           45
gaa ggt ggt ggc agt gat gaa gag gag aca ggc agt cct tca gaa gat    313
Glu Gly Gly Gly Ser Asp Glu Glu Glu Thr Gly Ser Pro Ser Glu Asp

```

051399 022400

	50		55		60	
ggc atg cag agt gca cgc acc cag gca cgc cca aga gag ccc ctg gag						361
Gly Met Gln Ser Ala Arg Thr Gln Ala Arg Pro Arg Glu Pro Leu Glu						
	65		70		75	
gat ggt gac cca gag gat gac agg acg ctt gat gat gat gag ctg gct						409
Asp Gly Asp Pro Glu Asp Asp Arg Thr Leu Asp Asp Asp Glu Leu Ala						
	80		85		90	
gag tac gac tta gat aaa tat gat gag gaa ggt gac cca gat gct gag						457
Glu Tyr Asp Leu Asp Lys Tyr Asp Glu Glu Gly Asp Pro Asp Ala Glu						
	95		100		105	
act ctt ggt gaa tct ctc ttg ggt ctt acg gtc tac ggg agt aat gat						505
Thr Leu Gly Glu Ser Leu Leu Gly Leu Thr Val Tyr Gly Ser Asn Asp						
	110		115		120	
caa gat cct tac gtt act ctg aaa gat aca tca atg aca ttt ttt tcc						553
Gln Asp Pro Tyr Val Thr Leu Lys Asp Thr Ser Met Thr Phe Phe Ser						
	130		135		140	
tct cac tta gga aca ata tgaacgtgaa gattttcttga ttaagcccag						601
Ser His Leu Gly Thr Ile						
	145					
tgataatctt atagtttgtg gccga						626
<210>	4020					
<211>	481					
<212>	DNA					
<213>	Homo sapiens					
<220>						
<221>	CDS					
<222>	108..455					
<400>	4020					
gttttttttag tctatcgctg cggttgagag cgctgtaggg agcctgtgct gtgccgcgca						60
gttaggcagc agcagccgcg gagcagtagc cgccgtggga gggagcc atg aag cat						116
					Met Lys His	
					1	
tac gag gtg gag att ctg gac gca aag aca agg gag aag ctg tgt ttc						164
Tyr Glu Val Glu Ile Leu Asp Ala Lys Thr Arg Glu Lys Leu Cys Phe						
	5		10		15	
ttg gac aag gtg gag ccc cac gcc acc att gcg gag atc aag aac ctc						212
Leu Asp Lys Val Glu Pro His Ala Thr Ile Ala Glu Ile Lys Asn Leu						
	20		25		30	
ttc act aag acc cat ccg cag tgg tac ccc gcc cgc cag tcc ctc cgc						260
Phe Thr Lys Thr His Pro Gln Trp Tyr Pro Ala Arg Gln Ser Leu Arg						
	40		45		50	
ctg gac ccc aag ggc aag tcc ctg aag gat gag gat gtt ctg cag aag						308
Leu Asp Pro Lys Gly Lys Ser Leu Lys Asp Glu Asp Val Leu Gln Lys						
	55		60		65	
ctg ccc gtg ggc acc acg gcc aca ctg tac ttc cgg gac ctg ggg gcc						356
Leu Pro Val Gly Thr Thr Ala Thr Leu Tyr Phe Arg Asp Leu Gly Ala						
	70		75		80	
cag atc agc tgg gtg acg gtc ttc cta aca gag tac gcg ggg ccc ttt						404
Gln Ile Ser Trp Val Thr Val Phe Leu Thr Glu Tyr Ala Gly Pro Phe						
	85		90		95	



<222> 27..350

<400> 4022

aggcccggtcc ccgagccctg ccaacc atg gtg aac ttg ggt ctg tcc cgg gtg 53  
Met Val Asn Leu Gly Leu Ser Arg Val  
1 5  
gac gac gcc gtg gct gcc aag cac ccg gga ctc ggg gag tat gcc gca 101  
Asp Asp Ala Val Ala Ala Lys His Pro Gly Leu Gly Glu Tyr Ala Ala  
10 15 20 25  
tgc cag tca cac gcc ttc atg aag ggc gtt ttc acc ttc gtc aca ggc 149  
Cys Gln Ser His Ala Phe Met Lys Gly Val Phe Thr Phe Val Thr Gly  
30 35 40  
acc ggc atg gcc ttt ggc ttg cag atg ttc att cag agg aag ttt cca 197  
Thr Gly Met Ala Phe Gly Leu Gln Met Phe Ile Gln Arg Lys Phe Pro  
45 50 55  
tac cct ttg cag tgg agc ctc cta gtg gcc gtg gtt gca ggc tyt gtg 245  
Tyr Pro Leu Gln Trp Ser Leu Leu Val Ala Val Val Ala Gly Xaa Val  
60 65 70  
gtc agc tac ggg gtg acg aga gtg gag tcg gag aaa tgc aac aac ctc 293  
Val Ser Tyr Gly Val Thr Arg Val Glu Ser Glu Lys Cys Asn Asn Leu  
75 80 85  
tgg ctc ttc ctg gag acc ggg cag ctc ccc aaa gac agg agc aca gat 341  
Trp Leu Phe Leu Glu Thr Gly Gln Leu Pro Lys Asp Arg Ser Thr Asp  
90 95 100 105  
cag aga agc taggagagct ccagcagggg cacagaggat tgggggcagg agg 393  
Gln Arg Ser

<210> 4023

<211> 413

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> 42..344

<400> 4023

ttgaagtgtt gaataaacac ttatttttga cttcaaaacc a atg gtc tac ttg gtt 56  
Met Val Tyr Leu Val  
1 5  
aat ctt tct gaa aaa gac tac att aga aag aaa aac aaa tgt ggg gcc 104  
Asn Leu Ser Glu Lys Asp Tyr Ile Arg Lys Lys Asn Lys Cys Gly Ala  
10 15 20  
ttg gaa ctc aag ttg caa gaa ttg agt gct gag gag aga cag aag tat 152  
Leu Glu Leu Lys Leu Gln Glu Leu Ser Ala Glu Glu Arg Gln Lys Tyr  
25 30 35  
ctg gaa gcg aac atg aca caa agt gct ttg cca aag atc att aag gct 200  
Leu Glu Ala Asn Met Thr Gln Ser Ala Leu Pro Lys Ile Ile Lys Ala  
40 45 50  
ggg ttt gca gca ctc caa cta gaa tac ttt ttc act gca rgc cca gat 248  
Gly Phe Ala Ala Leu Gln Leu Glu Tyr Phe Phe Thr Ala Xaa Pro Asp  
55 60 65

gaa gtg cgt gca tgg acc atc agg aaa ggg act aag gct cct cag gct 296  
 Glu Val Arg Ala Trp Thr Ile Arg Lys Gly Thr Lys Ala Pro Gln Ala  
 70 75 80 85  
 gca gga aag att cac aca gat ttt gaa aag gga ttc ata tgg ctg aag 344  
 Ala Gly Lys Ile His Thr Asp Phe Glu Lys Gly Phe Ile Trp Leu Lys  
 90 95 100  
 taatgaaata cgaagatttt aaagaggaag gttctgaaaa tgcagtcaag gctgctggaa 404  
 agtacagac 413

<210> 4024  
 <211> 461  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 86..457

<400> 4024  
 cttttgttaa gcagcgaggg cgcgaccgcg ggtactctgc tgccggcttc tcggagcggc 60  
 gctgggcgac cagagcaggg togag atg tcc tac atc ccg ggc cag ccg gtc 112  
 Met Ser Tyr Ile Pro Gly Gln Pro Val  
 1 5  
 acc gcc gtg gtg caa aga gtt gaa att cac aag ctg cgt caa ggt gag 160  
 Thr Ala Val Val Gln Arg Val Glu Ile His Lys Leu Arg Gln Gly Glu  
 10 15 20 25  
 aac tta atc ctg ggt ttc agc att gga ggt gga atc gac cag gac cct 208  
 Asn Leu Ile Leu Gly Phe Ser Ile Gly Gly Gly Ile Asp Gln Asp Pro  
 30 35 40  
 tcc cag aat ccc ttc tct gaa gac aag acg gac aag ggt att tat gtc 256  
 Ser Gln Asn Pro Phe Ser Glu Asp Lys Thr Asp Lys Gly Ile Tyr Val  
 45 50 55  
 aca cgg gtg tct gaa gga ggc cct gct gar atc gct ggg ctg cag att 304  
 Thr Arg Val Ser Glu Gly Gly Pro Ala Glu Ile Ala Gly Leu Gln Ile  
 60 65 70  
 gga gac aag atc atg cag gtg aac ggc tgg gac atg acc atg gtc aca 352  
 Gly Asp Lys Ile Met Gln Val Asn Gly Trp Asp Met Thr Met Val Thr  
 75 80 85  
 cac gac cag gcc cgc aag cgg ctc acc aag cgc tcg gag gag gtg gtg 400  
 His Asp Gln Ala Arg Lys Arg Leu Thr Lys Arg Ser Glu Glu Val Val  
 90 95 100 105  
 cgt ctg ctg gtg acg cgg cag tcg ctg cag aag gcc gtg cag cag tcc 448  
 Arg Leu Leu Val Thr Arg Gln Ser Leu Gln Lys Ala Val Gln Gln Ser  
 110 115 120  
 atg ctg tcc tagc 461  
 Met Leu Ser

<210> 4025  
 <211> 343  
 <212> DNA  
 <213> Homo sapiens

<220>

<221> CDS  
<222> 26..337

<400> 4025

```

agcctgaagc ggaagtggag gaaag atg gag gac cat cag cac gtg ccc atc      52
                               Met Glu Asp His Gln His Val Pro Ile
                               1       5
gac atc cag acc agc aag ctg ctc gat tgg ctg gtg gac aga agg cac      100
Asp Ile Gln Thr Ser Lys Leu Leu Asp Trp Leu Val Asp Arg Arg His
10       15       20       25
tgc agc ctg aaa tgg cag agt ctg gtg ctg acg atc cgs nga gaa gat      148
Cys Ser Leu Lys Trp Gln Ser Leu Val Leu Thr Ile Arg Xaa Glu Asp
30       35       40
caa tgc tgc cat cca gga cat gcc aga gag cga aga gat cgc cca gct      196
Gln Cys Cys His Pro Gly His Ala Arg Glu Arg Arg Asp Arg Pro Ala
45       50       55
gct gtc tgg gtc cta cat tca cta ctt tca ctg cct aag aat cct gga      244
Ala Val Trp Val Leu His Ser Leu Leu Ser Leu Pro Lys Asn Pro Gly
60       65       70
cct tct caa agg cac aga ggc ctc cac gaa gaa tat ttt tgg ccg ata      292
Pro Ser Gln Arg His Arg Gly Leu His Glu Glu Tyr Phe Trp Pro Ile
75       80       85
ctc ttc aca gcg gat gaa gga ttg gca gga gat tat agc tct gta      337
Leu Phe Thr Ala Asp Glu Gly Leu Ala Gly Asp Tyr Ser Ser Val
90       95      100
tgagaa
                                343

```

<210> 4026  
<211> 425  
<212> DNA  
<213> Homo sapiens

<220>  
<221> CDS  
<222> 70..405

<400> 4026

```

gaaatcgtag gacttccgaa agcagcgggtg gcgtttgctt cactgcttgg aaggtgtgag      60
trcgcaag atg cga aag gtg gtt ttg atc acc ggg gct agc agt ggc att      111
      Met Arg Lys Val Val Leu Ile Thr Gly Ala Ser Ser Gly Ile
      1       5      10
ggc ctg gcc ctc tgc aag cgg ctg ctg gcg gaa gat gay gag ctt cat      159
Gly Leu Ala Leu Cys Lys Arg Leu Leu Ala Glu Asp Asp Glu Leu His
15       20       25       30
ctg tgt dtg gcg tgc agg aac atg agc aag gca gaa gct gtc tgt gct      207
Leu Cys Xaa Ala Cys Arg Asn Met Ser Lys Ala Glu Ala Val Cys Ala
35       40       45
gct ctg ctg gcc tct cac ccc act gct gag gtc acc att gtc cag gtg      255
Ala Leu Leu Ala Ser His Pro Thr Ala Glu Val Thr Ile Val Gln Val
50       55       60
gat gtc agc aac ctg cag tcg gtc ttc cgg gcc tcc aag gaa ctt aag      303
Asp Val Ser Asn Leu Gln Ser Val Phe Arg Ala Ser Lys Glu Leu Lys

```

65	70	75	
caa agg ttt cag aga tta	gac tgt ata tat cta	aat gct ggg atc atg	351
Gln Arg Phe Gln Arg Leu	Asp Cys Ile Tyr Leu	Asn Ala Gly Ile Met	
80	85	90	
cct aat cca caa cwa ata	tca aag cac ttt tct	ttg gcc tct ttt caa	399
Pro Asn Pro Gln Xaa Ile	Ser Lys His Phe Ser	Leu Ala Ser Phe Gln	
95	100	105	110
gaa aag tgattcatat	gkctccaca		425
Glu Lys			

&lt;210&gt; 4027

&lt;211&gt; 425

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; 46..417

&lt;400&gt; 4027

gggtgccgct ggcggccggtt gccagggtag	gggtcgcttt gcggc atg gcg atg gcg	57
	Met Ala Met Ala	
	1	
gag ggc gag agg act gag tgt gct	gag ccc ccc cgg gac gaa ccc ccg	105
Glu Gly Glu Arg Thr Glu Cys Ala	Glu Pro Pro Arg Asp Glu Pro Pro	
5	10	15
gct gat gga gct ctg aag cgg gca	gag gag ctc aag act cag gcc aat	153
Ala Asp Gly Ala Leu Lys Arg Ala	Glu Glu Leu Lys Thr Gln Ala Asn	
	25	30
gac tac ttc aaa gcc aag gac tac	gag aac gcc atc aag ttc tac agc	201
Asp Tyr Phe Lys Ala Lys Asp Tyr	Glu Asn Ala Ile Lys Phe Tyr Ser	
	40	45
cag gcc atc gag ctg aac ccc agc	aat gcc atc tac tat ggc aac cgc	249
Gln Ala Ile Glu Leu Asn Pro Ser	Asn Ala Ile Tyr Tyr Gly Asn Arg	
	55	60
agc ctg gcc tac ctg cgc act gag	tgc tat ggc tac gcg ctg gga gac	297
Ser Leu Ala Tyr Leu Arg Thr Glu	Cys Tyr Gly Tyr Ala Leu Gly Asp	
	70	75
gcc acg cgg gcc att gag ctg gac	aag aag tac atc aag ggt tat tac	345
Ala Thr Arg Ala Ile Glu Leu Asp	Lys Lys Tyr Ile Lys Gly Tyr Tyr	
85	90	95
cgc cgg gct gcc agc aac atg gca	ctg ggc agt tcc ggg ccg cgc tgc	393
Arg Arg Ala Ala Ser Asn Met Ala	Leu Gly Ser Ser Gly Pro Arg Cys	
	105	110
gag act acg aga cgg tgg tca agg	tgaagccc	425
Glu Thr Thr Arg Arg Trp Ser Arg		
	120	

&lt;210&gt; 4028

&lt;211&gt; 527

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens



<220>  
 <221> CDS  
 <222> 115..507

<400> 4028

```

acacatgcct gcttaaagcc ctctccatcc totgcctcac ccagtccccg ctgagactga      60
gcagacgcct ccaggatctg tcggcagctg ctgtttctgag ggagagcaga gacc atg      117
                                     Met
                                     1
tct gac ata gaa gag gtg gtg gaa gag tac gag gag gag gag cag gaa      165
Ser Asp Ile Glu Glu Val Val Glu Glu Tyr Glu Glu Glu Glu Gln Glu
      5              10              15
ggt aag cgt aaa cgt gtg trc tca ttt gga tca aag aca gcc tgg ttc      213
Gly Lys Arg Lys Arg Val Xaa Ser Phe Gly Ser Lys Thr Ala Trp Phe
      20              25              30
gaa act gac cca cct ctt ctg tct tct ctt gct gcc tgg act tct gag      261
Glu Thr Asp Pro Pro Leu Leu Ser Ser Leu Ala Ala Trp Thr Ser Glu
      35              40              45
cag aag cag ctg ttg aag agc agg agg agg cag cgg aag agg atg ctg      309
Gln Lys Gln Leu Leu Lys Ser Arg Arg Arg Gln Arg Lys Arg Met Leu
      50              55              60              65
aag cag agg ctg aga ccg agg aga cca ggg cag aag aag atg aag aag      357
Lys Gln Arg Leu Arg Pro Arg Arg Pro Gly Gln Lys Lys Met Lys Lys
      70              75              80
aag agg aag caa agg agg ctg aag atg gcc caa tgg agg agt cca aac      405
Lys Arg Lys Gln Arg Arg Leu Lys Met Ala Gln Trp Arg Ser Pro Asn
      85              90              95
caa agc cca ggt cgt tca tgc cca act tgn tgc ctg cca aga tcc cag      453
Gln Ser Pro Gly Arg Ser Cys Pro Thr Xaa Cys Leu Pro Arg Ser Gln
      100             105             110
atg gag aga gag tgg act tng rtg aca tcc acs gga agc gca tgg aga      501
Met Glu Arg Glu Trp Thr Xaa Xaa Thr Ser Thr Gly Ser Ala Trp Arg
      115             120             125
agg rcc tgaatgagtt gcaggcgctg      527
Arg Xaa
130

```

<210> 4029  
 <211> 453  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 96..407

<400> 4029

```

ctttggggccg tagttagtgt ggggccgtgt ctccagtccac ccaaggtctc ctccgagtcgc      60
ctggagaggc actcggacct ggagcagtga ggaga atg aat acc ttc caa gac      113
                                     Met Asn Thr Phe Gln Asp
                                     1              5
cag agt ggc agc tcc agt aat aga gaa ccc ctt ttg agg tgt agt gat      161

```

Gln Ser Gly Ser Ser Ser Asn Arg Glu Pro Leu Leu Arg Cys Ser Asp	
10 15 20	
gca cgg agg gac ttg gag ctt gcg att ggt gga gtt ctc cgg gct gaa	209
Ala Arg Arg Asp Leu Glu Leu Ala Ile Gly Gly Val Leu Arg Ala Glu	
25 30 35	
cag caa att aaa gat aac ttg cga gag gtc aaa gct cag att cac agt	257
Gln Gln Ile Lys Asp Asn Leu Arg Glu Val Lys Ala Gln Ile His Ser	
40 45 50	
tgc ata agc cgt cac ctg gaa tgt ctt aga agc cgt gag gta tgg ctg	305
Cys Ile Ser Arg His Leu Glu Cys Leu Arg Ser Arg Glu Val Trp Leu	
55 60 65 70	
tat gaa cag gtg gac ctt att tat cag ctt aaa gag gag aca ctt caa	353
Tyr Glu Gln Val Asp Leu Ile Tyr Gln Leu Lys Glu Glu Thr Leu Gln	
75 80 85	
cag cag gct cag cag ctc tac tcg tta ttg ggc cag tta ccc aaa aca	401
Gln Gln Ala Gln Gln Leu Tyr Ser Leu Leu Gly Gln Leu Pro Lys Thr	
90 95 100	
ang atc tagccaatca agtctctgtg tgcctggaga gactgggcag tttgac	453
Xaa Ile	

<210> 4030  
 <211> 469  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 76..465

<400> 4030	
cttctcccag cattgcccc cccacgtttc agcacagcgc tggccgcagt ctgacaggaa	60
agggacggag ccaag atg gcg gcg gcc gac ggc gac gac tcg ctg tac ccc	111
Met Ala Ala Ala Asp Gly Asp Asp Ser Leu Tyr Pro	
1 5 10	
atc gcg gtg ctc ata gac gaa ctc cgc aat gag gac gtt cag ctt cgc	159
Ile Ala Val Leu Ile Asp Glu Leu Arg Asn Glu Asp Val Gln Leu Arg	
15 20 25	
ctc aac agc atc aag aag ctg tcc acc atc gcc ttg gcc ctt ggg gtt	207
Leu Asn Ser Ile Lys Lys Leu Ser Thr Ile Ala Leu Ala Leu Gly Val	
30 35 40	
gaa agg acc cga agt gag ctt ctg cct ttc ctt aca gat acc atc tat	255
Glu Arg Thr Arg Ser Glu Leu Leu Pro Phe Leu Thr Asp Thr Ile Tyr	
45 50 55 60	
gat gaa gat gag gtc ctc ctg gcc ctg gca gaa cag ctg gga acc ttc	303
Asp Glu Asp Glu Val Leu Leu Ala Leu Ala Glu Gln Leu Gly Thr Phe	
65 70 75	
act acc ctg gtg gga ggc cca gag tac gtg cac tgc ctg ctg cca ccg	351
Thr Thr Leu Val Gly Gly Pro Glu Tyr Val His Cys Leu Leu Pro Pro	
80 85 90	
ctg gag tcg ctg gcc aca gtg gag aca gtg gtg cgg gac aag gca	399
Leu Glu Ser Leu Ala Thr Val Glu Thr Val Val Arg Asp Lys Ala	
95 100 105	
gtg gag tcc tta cgg gcc atc tca cac gag cac tcg ccc tct gac ctg	447

Val Glu Ser Leu Arg Ala Ile Ser His Glu His Ser Pro Ser Asp Leu  
 110 115 120

gag gcg cac ttt gtg cgc tagt  
 Glu Ala His Phe Val Arg  
 125 130

469

<210> 4031

<211> 458

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> 91..396

<400> 4031

acttggtgcgc atgctccggg tgtcccgagg ttgtcctgcg ccggtgttcc cacgtgcggc 60  
 ctgaacctga gcgcataatg ttatgaggag atg gga gca cta gtg att cgc ggt 114  
 Met Gly Ala Leu Val Ile Arg Gly

1 5  
 atc agg aat ttc aac cta gag aac cga gcg gaa cgg gaa atc agc aag 162  
 Ile Arg Asn Phe Asn Leu Glu Asn Arg Ala Glu Arg Glu Ile Ser Lys

10 15 20  
 atg aag ccc tct gtc gct ccc aga cac ccc tct acc aac agc ctc ctg 210  
 Met Lys Pro Ser Val Ala Pro Arg His Pro Ser Thr Asn Ser Leu Leu  
 25 30 35 40

cga gag cag att agt ctc tat cca gaa gtt aaa gga gag att gct cgt 258  
 Arg Glu Gln Ile Ser Leu Tyr Pro Glu Val Lys Gly Glu Ile Ala Arg  
 45 50 55

aaa gat gaa aag ctg ctg tcg ttt cta aaa gat gtg tat gtt gat tcc 306  
 Lys Asp Glu Lys Leu Leu Ser Phe Leu Lys Asp Val Tyr Val Asp Ser  
 60 65 70

aaa gat cct gtg tct tcc ttg cag gta aaa gct gct gaa ksa tgt caa 354  
 Lys Asp Pro Val Ser Ser Leu Gln Val Lys Ala Ala Glu Xaa Cys Gln  
 75 80 85

gag ccg aag aat tca gat tgc cga aag acc atc att ttg ata 396  
 Glu Pro Lys Asn Ser Asp Cys Arg Lys Thr Ile Ile Leu Ile  
 90 95 100

tgawratatw agagcattcc caaaggcaaa atttccattg tagagcattg acacttctca 456  
 ta 458

<210> 4032

<211> 424

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> 20..394

<400> 4032

ctttcgggtg gtcaggaag atg gcg gcc tct ggg gcg gac gca ggt cct ggt 52

Met Ala Ala Ser Gly Ala Asp Ala Gly Pro Gly  
 1 5 10  
 aca ata ctt ggt gtt acg aaa gga tct atc aca agc tcc gtt ctc ctg 100  
 Thr Ile Leu Gly Val Thr Lys Gly Ser Ile Thr Ser Ser Val Leu Leu  
 15 20 25  
 gcc ggc ggg cgc act ggt agc gca ggc ttg tca cgc ggc cac cgg gcc 148  
 Ala Gly Gly Arg Thr Gly Ser Ala Gly Leu Ser Arg Gly His Arg Ala  
 30 35 40  
 ttg cac act cac cgc gac cac ccg cac aca gcc gct tac ctc caa gag 196  
 Leu His Thr His Arg Asp His Pro His Thr Ala Ala Tyr Leu Gln Glu  
 45 50 55  
 ctg ggg cgc atg cgc aaa gtg gtc ctc gag gcc cca gat gag acc acc 244  
 Leu Gly Arg Met Arg Lys Val Val Leu Glu Ala Pro Asp Glu Thr Thr  
 60 65 70 75  
 cta aag gag ctg gcc gag acc ctg caa cag aag aac att gac cac atg 292  
 Leu Lys Glu Leu Ala Glu Thr Leu Gln Gln Lys Asn Ile Asp His Met  
 80 85 90  
 ctg tgg ctt gag caa cca gag aat atc gcc act tgt att gct ctc cgg 340  
 Leu Trp Leu Glu Gln Pro Glu Asn Ile Ala Thr Cys Ile Ala Leu Arg  
 95 100 105  
 ccc tac ccc aag gaa gaa gtg ggc cag tat ttg aag aag ttc cga ttg 388  
 Pro Tyr Pro Lys Glu Glu Val Gly Gln Tyr Leu Lys Lys Phe Arg Leu  
 110 115 120  
 ttc aag taactgctgc tttgatgtgt ttgaatanmc 424  
 Phe Lys  
 125

<210> 4033  
 <211> 382  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 54..371

<400> 4033  
 acctctgcag agccgggtgg agcccattga cgtccagcga asnaggagca gcg atg 56  
 Met  
 1  
 gac ggt cgg gtg cag ctg ata aag gcc ctc ctg gcc ttg ccg atc cgg 104  
 Asp Gly Arg Val Gln Leu Ile Lys Ala Leu Leu Ala Leu Pro Ile Arg  
 5 10 15  
 cct gcg acg cgt cgc tgg agg aac ccg att ccc ttt ccc gag acg ttt 152  
 Pro Ala Thr Arg Arg Trp Arg Asn Pro Ile Pro Phe Pro Glu Thr Phe  
 20 25 30  
 gac ggc gat acc gac cga ctc ccg gag ttc atc gtg cag acg ggc tcc 200  
 Asp Gly Asp Thr Asp Arg Leu Pro Glu Phe Ile Val Gln Thr Gly Ser  
 35 40 45  
 tac atg ttc gtg gac gag aac acg ttc tcc agc gac gcc ctg aag gtg 248  
 Tyr Met Phe Val Asp Glu Asn Thr Phe Ser Ser Asp Ala Leu Lys Val  
 50 55 60 65  
 acg ttc ctc atc acc cgc ctc tsc tcc cca cca gac tgc cag acg act 296

```
<220>  
<221> CDS  
<222> 18..341
```

```
<220>  
<221> CDS  
<222> 35..418
```

&lt;400&gt; 4035

```

gttgacacagt tgtttccggg aagcgggact ccaa atg ggt cgc agt cgc agc cgc      55
                               Met Gly Arg Ser Arg Ser Arg
                               1           5
tct cca cgg agg gaa cgt agg cgt tcc cgg tcc aca tcc cgg gag aga      103
Ser Pro Arg Arg Glu Arg Arg Arg Ser Arg Ser Thr Ser Arg Glu Arg
          10           15           20
gaa cgc agg cgc cga gaa agg tcc agg tct cgg gag aga gat cgg aga      151
Glu Arg Arg Arg Arg Glu Arg Ser Arg Ser Arg Glu Arg Asp Arg Arg
          25           30           35
agg agc cgc tgc cga tcc ccg cac cga aga cgc tcc cga tct cca aga      199
Arg Ser Arg Ser Arg Ser Pro His Arg Arg Arg Ser Arg Ser Pro Arg
          40           45           50           55
cga cat aga tcc aca tct cct tcc cct tct cga ctg aaa gaa aga aga      247
Arg His Arg Ser Thr Ser Pro Ser Pro Ser Arg Leu Lys Glu Arg Arg
          60           65           70
gat gag gaa aag aaa gaa aca aaa gaa aca aag agc aaa gaa cgg crg      295
Asp Glu Glu Lys Lys Glu Thr Lys Glu Thr Lys Ser Lys Glu Arg Xaa
          75           80           85
att act gag gaa gac tta gag ggc aaa aca gag gra gaa ata gra atg      343
Ile Thr Glu Glu Asp Leu Glu Gly Lys Thr Glu Xaa Glu Ile Xaa Met
          90           95           100
atg aag tta ank ggg att tgc tcc ttt grc tcc aca aaa ggt aag aag      391
Met Lys Leu Xaa Gly Ile Cys Ser Phe Xaa Ser Thr Lys Gly Lys Lys
          105           110           115
gtg gat ggc tct gta aat gcc tat gca taartgtc      426
Val Asp Gly Ser Val Asn Ala Tyr Ala
          120           125

```

&lt;210&gt; 4036

&lt;211&gt; 828

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; 245..802

&lt;400&gt; 4036

```

gagtcacctg accaagaccc tggagttaca atggcggcgc ccatgctgcg ctggggctgc      60
cgtggaagac gttgggcttt cgcccgggtt gacggtggtt cttgccaccg aagaggggct      120
ccgactgggt ccacatccaa ccagattagg ggagagagct cagtggctca gcagcccctc      180
cacacggccc agaagacgag gaaaggtgaa cacaaatggg ctgctgtggt aggtttggaa      240
attc atg ccc aga ttt cct cca act cta atc ttc tct gga tct caa gtt      289
      Met Pro Arg Phe Pro Pro Thr Leu Ile Phe Ser Gly Ser Gln Val
          1           5           10           15
cgc ttt tca gca cct cca aat tct ttg gtt tct ttt ttt gat gca tct      337
Arg Phe Ser Ala Pro Pro Asn Ser Leu Val Ser Phe Phe Asp Ala Ser
          20           25           30
cta cct gga act ttg ccg gtt ctc aac agg rgr tgt gta gaa gcg gcg      385
Leu Pro Gly Thr Leu Pro Val Leu Asn Arg Xaa Cys Val Glu Ala Ala
          35           40           45

```

gtg atg aca ggc ctg gct ctg aac tgc cac ata aac aag aag tcc ttg	433
Val Met Thr Gly Leu Ala Leu Asn Cys His Ile Asn Lys Lys Ser Leu	
50 55 60	
ttt gac agg aag cac tac ttc tat gca gac ctc cct gca ggc tac caa	481
Phe Asp Arg Lys His Tyr Phe Tyr Ala Asp Leu Pro Ala Gly Tyr Gln	
65 70 75	
att acc cag cag agg ctc cca att gct gtg aat ggg agc ttg ata tat	529
Ile Thr Gln Gln Arg Leu Pro Ile Ala Val Asn Gly Ser Leu Ile Tyr	
80 85 90 95	
ggc gtc tgt gca ggg aag aag cag agt cag gtg atc ccc aag acg gtg	577
Gly Val Cys Ala Gly Lys Lys Gln Ser Gln Val Ile Pro Lys Thr Val	
100 105 110	
agg atc aag cag atc cag ttg gag caa gac agt ggm aaa agc ctc cac	625
Arg Ile Lys Gln Ile Gln Leu Glu Gln Asp Ser Gly Lys Ser Leu His	
115 120 125	
gac aac ctg agg tct cag acg ctc att gat ttg aac agg gca ggw gtg	673
Asp Asn Leu Arg Ser Gln Thr Leu Ile Asp Leu Asn Arg Ala Gly Val	
130 135 140	
ggc ctt ctg gag gtg gtc ctg gmg ccc gac atg tcc tgt gga gaa gag	721
Gly Leu Leu Glu Val Val Leu Xaa Pro Asp Met Ser Cys Gly Glu Glu	
145 150 155	
gsn gca aca gct gtc agg gag ctg cag ctg atc can nnk gcc ctg ggg	769
Xaa Ala Thr Ala Val Arg Glu Leu Gln Leu Ile Xaa Xaa Ala Leu Gly	
160 165 170 175	
aac cag cca sag gaa cat ggc aga ggg ccc agt tgagagtgga tgccaatata	822
Asn Gln Pro Xaa Glu His Gly Arg Gly Pro Ser	
180 185	
tccgtg	828
<210> 4037	
<211> 433	
<212> DNA	
<213> Homo sapiens	
<220>	
<221> CDS	
<222> 43..360	
<400> 4037	
gcgtttccgt ttccgctagg actctggcag ttggtgagca tc atg gca acc gtt	54
Met Ala Thr Val	
1	
aca gcc aca acc aaa gtc ccg gag atc cgt gat gta aca agg att gag	102
Thr Ala Thr Thr Lys Val Pro Glu Ile Arg Asp Val Thr Arg Ile Glu	
5 10 15 20	
cga atc ggt gcc cac tcc cac atc cgg gga ctg ggg ctg gac gat gcc	150
Arg Ile Gly Ala His Ser His Ile Arg Gly Leu Gly Leu Asp Asp Ala	
25 30 35	
ttg gag cct cgg cag gct tcg caa ggc atg gtg ggt cag ctg gcg gca	198
Leu Glu Pro Arg Gln Ala Ser Gln Gly Met Val Gly Gln Leu Ala Ala	
40 45 50	
cgg cgg gcg gct ggc gtg gtg ctg gag atg atc cgg gaa ggg aag att	246
Arg Arg Ala Ala Gly Val Val Leu Glu Met Ile Arg Glu Gly Lys Ile	

```

      55              60              65
gcc ggt cgg gca gtc ctt att gct ggc cag ccg ggc acg ggg aag acg      294
Ala Gly Arg Ala Val Leu Ile Ala Gly Gln Pro Gly Thr Gly Lys Thr
      70              75              80
gcc atc gcc atg ggc atg ggc cag gcc ctg ggc cct gan cac gcc att      342
Ala Ile Ala Met Gly Met Ala Gln Ala Leu Gly Pro Xaa His Ala Ile
      85              90              95              100
cac agc cat cgc cgg cag tgaaatcttc tccctggaga tgagcaagac      390
His Ser His Arg Arg Gln
              105
cgaggcgctg acgcaggcct tccggcggtc catcggcgtt cgc      433

<210> 4038
<211> 568
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> 31..348

<400> 4038
gnagaggcgt gatctggcct tgcactcgct atg tcc act aac aat atg tcg gac      54
              1              5
Met Ser Thr Asn Asn Met Ser Asp
cca cgg agg ccg aac aaa gtg ctg agg tac aag ccc ccg ccg agc gaa      102
Pro Arg Arg Pro Asn Lys Val Leu Arg Tyr Lys Pro Pro Pro Ser Glu
      10              15              20
tgt aac ccg gcc ttg gac gac ccg acg ccg gac tac atg aac ctg ctg      150
Cys Asn Pro Ala Leu Asp Asp Pro Thr Pro Asp Tyr Met Asn Leu Leu
      25              30              35              40
ggc atg atc ttc agc atg tgc ggc ctc atg ctt aag ctg aag tgg tgt      198
Gly Met Ile Phe Ser Met Cys Gly Leu Met Leu Lys Leu Lys Trp Cys
              45              50              55
gct tgg gtc gct gtc tac tgc tcc ttc atc agc ttt gcc aac tct cgg      246
Ala Trp Val Ala Val Tyr Cys Ser Phe Ile Ser Phe Ala Asn Ser Arg
              60              65              70
agc tcg gag gac acg aag caa atg atg agt agc ttc atg ctg tcc atc      294
Ser Ser Glu Asp Thr Lys Gln Met Ser Ser Phe Met Leu Ser Ile
              75              80              85
tct gcc gtg gtg atg tcc tat ctg cag aat cct cag ccc atg acg ccc      342
Ser Ala Val Val Met Ser Tyr Leu Gln Asn Pro Gln Pro Met Thr Pro
              90              95              100
cca tgg tgatacagcc tagaagggtc acattttgga ccctgtctat ccactaggmc      398
Pro Trp
      105
tgggcttttg ctgctaaacc tgctgccttc agctgccatc ctggacttcc ctgaatgagg      458
ccgtctcggg gccccagct ggatagaggg aacctggccc tttcctaggg aacaccctag      518
gcttaccct cctgmctccc ttcccctgcc tgctgctggg ggagatgctg      568

<210> 4039
<211> 413
<212> DNA

```



<213> Homo sapiens

<220>

<221> CDS

<222> 22..387

<400> 4039

aggcgcttac agtgcaccaa g atg gcc gcc ccc gtg gat cta gag ctg aag 51  
Met Ala Ala Pro Val Asp Leu Glu Leu Lys  
1 5 10  
aag gcc ttc aca gag ctt caa gcc aaa gtt att gac act caa cag aag 99  
Lys Ala Phe Thr Glu Leu Gln Ala Lys Val Ile Asp Thr Gln Gln Lys  
15 20 25  
gtg aag ctc gca gac ata cag att gaa cag cta aac aga acg aaa aag 147  
Val Lys Leu Ala Asp Ile Gln Ile Glu Gln Leu Asn Arg Thr Lys Lys  
30 35 40  
cat gca cat ctt aca gat aca gag atc atg act ttg gta gat gag act 195  
His Ala His Leu Thr Asp Thr Glu Ile Met Thr Leu Val Asp Glu Thr  
45 50 55  
aac atg tat gaa ggt gta gga aga atg ttt att ctt cag tcc aag gaa 243  
Asn Met Tyr Glu Gly Val Gly Arg Met Phe Ile Leu Gln Ser Lys Glu  
60 65 70  
gca att cac agt cag ctg tta gag aag cag aaa ata gca gaa gaa aaa 291  
Ala Ile His Ser Gln Leu Leu Glu Lys Gln Lys Ile Ala Glu Glu Lys  
75 80 85 90  
att aaa gaa cta gaa cag aaa aag tcc tac ctg gag cga agg tta aag 339  
Ile Lys Glu Leu Glu Gln Lys Lys Ser Tyr Leu Glu Arg Arg Leu Lys  
95 100 105  
gaa gct gag gac aac atc cgg gag atg ctg atg gca mga agg gcc aag 387  
Glu Ala Glu Asp Asn Ile Arg Glu Met Leu Met Ala Arg Arg Ala Lys  
110 115 120  
tagggagcct ctctgggaag ctcttc 413

<210> 4040

<211> 472

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> 28..414

<400> 4040

aggaagtgac gtcaggcggc cgcggag atg gag gat ttg ctc gac ttg gac gag 54  
Met Glu Asp Leu Leu Asp Leu Asp Glu  
1 5  
gag ctt cgc tac agc ttg gct acc tcc agg gcc aag atg ggt cgc cga 102  
Glu Leu Arg Tyr Ser Leu Ala Thr Ser Arg Ala Lys Met Gly Arg Arg  
10 15 20 25  
gct caa cag gag tca gcg cag gcc gag aat cac ctc aat ggc aag aat 150  
Ala Gln Gln Glu Ser Ala Gln Ala Glu Asn His Leu Asn Gly Lys Asn  
30 35 40

tcc tct ttg act ctg act gga gag act tcc tct gct aaa tta cct cgc	198
Ser Ser Leu Thr Leu Thr Gly Glu Thr Ser Ser Ala Lys Leu Pro Arg	
45 50 55	
tgc cga cag gga ggc tgg gca ggt gat tcc gtg aag gct tcg aag ttt	246
Cys Arg Gln Gly Gly Trp Ala Gly Asp Ser Val Lys Ala Ser Lys Phe	
60 65 70	
agg agg aag gct tct gaa gaa ata gaa gat ttc cgc ctc aga cca cag	294
Arg Arg Lys Ala Ser Glu Glu Ile Glu Asp Phe Arg Leu Arg Pro Gln	
75 80 85	
agc ctg aat gga tca gat tat gga gga gat att cct atc att ccg gat	342
Ser Leu Asn Gly Ser Asp Tyr Gly Gly Asp Ile Pro Ile Ile Pro Asp	
90 95 100 105	
ctg gag gaa gta cag gan gaa gac ttt gtt ttg cag gtg gca gcc ccc	390
Leu Glu Glu Val Gln Xaa Glu Asp Phe Val Leu Gln Val Ala Ala Pro	
110 115 120	
tcc cag cat cca gat aaa agc ggg tgatgacctt ccgtgacctg gacaatgacc	444
Ser Gln His Pro Asp Lys Ser Gly	
125	
tcatgaagta ctcagccatt cagacact	472
<210> 4041	
<211> 446	
<212> DNA	
<213> Homo sapiens	
<220>	
<221> CDS	
<222> 39..410	
<400> 4041	
aacagaatag cagcagtaat atcagttaca gcaatgca atg cag aaa gaa atc aca	56
Met Gln Lys Glu Ile Thr	
1 5	
ctg cct tca aga ctc ata tat tac atc aac caa gac tcg gaa agc cct	104
Leu Pro Ser Arg Leu Ile Tyr Tyr Ile Asn Gln Asp Ser Glu Ser Pro	
10 15 20	
tat cac gtt ctt gac aca aag gca aga cac cag caa aaa cat aat aag	152
Tyr His Val Leu Asp Thr Lys Ala Arg His Gln Gln Lys His Asn Lys	
25 30 35	
gct gtc cat ctg gcc cag gca agc ttc cag att gaa gcc ttc ggc tcc	200
Ala Val His Leu Ala Gln Ala Ser Phe Gln Ile Glu Ala Phe Gly Ser	
40 45 50	
aaa ttc att ctt gac ctc ata ctg aac aat ggt ttg ttg tct tct gat	248
Lys Phe Ile Leu Asp Leu Ile Leu Asn Asn Gly Leu Leu Ser Ser Asp	
55 60 65 70	
tat gtg gag att cac tac gaa aat ggg aaa cca cag tac tct aag ggt	296
Tyr Val Glu Ile His Tyr Glu Asn Gly Lys Pro Gln Tyr Ser Lys Gly	
75 80 85	
gga gag cac tgt tac tac cat gga agc atc aga ggc gtc aaa gac tcc	344
Gly Glu His Cys Tyr Tyr His Gly Ser Ile Arg Gly Val Lys Asp Ser	
90 95 100	
aag ggt ggc tct gtc aac ctg caa tgg act tcc cgg gat ggg aga aag	392
Lys Gly Gly Ser Val Asn Leu Gln Trp Thr Ser Arg Asp Gly Arg Lys	

105 110 115  
aga gag act ccg agt ata tagccttttt aatagttttt actatacaaaa atacat 446  
Arg Glu Thr Pro Ser Ile  
120

<210> 4042  
<211> 518  
<212> DNA  
<213> Homo sapiens

<220>  
<221> CDS  
<222> 73..417

<400> 4042  
tgaggatgcc gggaaggggt ggtgggtcggg ggcctmsasc ggcggttgca cttagttgcg 60  
gctgctgtca cc atg tcc cgc gtt ttg gtg cct tgc cat gtg aaa sgc tcc 111  
Met Ser Arg Val Leu Val Pro Cys His Val Lys Xaa Ser  
1 5 10  
gta gcc ctc cag gtg ggc gac gtg cgg acc tcc caa ggc cgg cct ggc 159  
Val Ala Leu Gln Val Gly Asp Val Arg Thr Ser Gln Gly Arg Pro Gly  
15 20 25  
gtg ctg gtc atc grt rtc acc ttc scc agc gtc gmk ccc ttc gag tkg 207  
Val Leu Val Ile Xaa Xaa Thr Phe Xaa Ser Val Xaa Pro Phe Glu Xaa  
30 35 40 45  
cag gaa atc acg ttt aag aat tac tac aca gct ttt ttg agc atc cgt 255  
Gln Glu Ile Thr Phe Lys Asn Tyr Tyr Thr Ala Phe Leu Ser Ile Arg  
50 55 60  
gtc cgt mag tac acc tca gca cac aca cct gcc aag tgg gtg acc tgc 303  
Val Arg Xaa Tyr Thr Ser Ala His Thr Pro Ala Lys Trp Val Thr Cys  
65 70 75  
ctg cgg gac tac tgc cta atg cct gac cca cac agt gag gag gga gcc 351  
Leu Arg Asp Tyr Cys Leu Met Pro Asp Pro His Ser Glu Glu Gly Ala  
80 85 90  
cag gag tat gta tcg ctg ttc amg cat cag atg ctg nsg aca tgg cta 399  
Gln Glu Tyr Val Ser Leu Phe Xaa His Gln Met Leu Xaa Thr Trp Leu  
95 100 105  
gaa tat cgg ars tac gcc tgattctgcg gcascacac cactgtggct 447  
Glu Tyr Arg Xaa Tyr Ala  
110 115  
gtcttttcaca gtggaggagc tgcagatcta tcagcagggga ccaaagagcc ctccgtgacc 507  
tttcccaagt g 518

<210> 4043  
<211> 409  
<212> DNA  
<213> Homo sapiens

<220>  
<221> CDS  
<222> 13..357

&lt;400&gt; 4043

```

gcacaatggg cc atg gag ttc ccg ttc gat gtg gac gcg ctg ttc ccg gag      51
      Met Glu Phe Pro Phe Asp Val Asp Ala Leu Phe Pro Glu
            1              5              10
cgg atc acg gtg ctg gac cag cac ctg agg ccc cca gcc cgc cga ccc      99
Arg Ile Thr Val Leu Asp Gln His Leu Arg Pro Pro Ala Arg Arg Pro
      15              20              25
gga acc aca acg ccg gcc cgt gtt gat cta cag cag caa att atg acc      147
Gly Thr Thr Thr Pro Ala Arg Val Asp Leu Gln Gln Ile Met Thr
      30              35              40              45
att ata gat gaa ctg ggc aag gct tct gcc aag gcc cag aat ctt tcc      195
Ile Ile Asp Glu Leu Gly Lys Ala Ser Ala Lys Ala Gln Asn Leu Ser
            50              55              60
gct cct atc act agt gca tca agg atg cag agt aac cgc cat gtt gtn      243
Ala Pro Ile Thr Ser Ala Ser Arg Met Gln Ser Asn Arg His Val Val
            65              70              75
kat att ctc aaa gac agt tca gcc cga ccg gct gga aaa gga gsc att      291
Xaa Ile Leu Lys Asp Ser Ser Ala Arg Pro Ala Gly Lys Gly Xaa Ile
            80              85              90
att ggt ttc atn aag tgg gat acr aga agc tct ttg tac tgg atg atc      339
Ile Gly Phe Xaa Lys Trp Asp Thr Arg Ser Ser Leu Tyr Trp Met Ile
            95              100              105
gtg arg ctc ata atg agg tagamcactt tgcacacctg acttttacay      387
Val Xaa Leu Ile Met Arg
      110              115
catgagtctg tgcaacgccca tg      409

```

&lt;210&gt; 4044

&lt;211&gt; 535

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; 38..454

&lt;400&gt; 4044

```

caaggatgat tttgcganta atcgagaatt tatcaca atg gtt gta tac aag act      55
      Met Val Val Tyr Lys Thr
            1              5
gat gga aaa aaa gtt tat tac cca gct gac cca cct cca tac att gat      103
Asp Gly Lys Lys Val Tyr Tyr Pro Ala Asp Pro Pro Pro Tyr Ile Asp
            10              15              20
gga att cga att aac agc cct cat tat ttg act aag ata aag ctg acc      151
Gly Ile Arg Ile Asn Ser Pro His Tyr Leu Thr Lys Ile Lys Leu Thr
            25              30              35
aca cct ggc acc cat acc ttt aca tta gtg gtt tct caa tat gaa aaa      199
Thr Pro Gly Thr His Thr Phe Thr Leu Val Val Ser Gln Tyr Glu Lys
            40              45              50
cag aac aca atc cat tac acg gtt cgg gta tat tca gca tgc agc ttt      247
Gln Asn Thr Ile His Tyr Thr Val Arg Val Tyr Ser Ala Cys Ser Phe
            55              60              65              70
act ttt tca aag att cct tca cca tac acc tta tca aaa cgg att aat      295

```

Thr Phe Ser Lys Ile Pro Ser Pro Tyr Thr Leu Ser Lys Arg Ile Asn  
                   75                  80                  85  
 gga aag tgg agt ggt cag agt gct gga gga tgt gga aat ttc caa gag 343  
 Gly Lys Trp Ser Gly Gln Ser Ala Gly Gly Cys Gly Asn Phe Gln Glu  
                   90                  95                  100  
 act cac aaa aat aac ccc atc tac caa ttc cat ata gaa aag act ggg 391  
 Thr His Lys Asn Asn Pro Ile Tyr Gln Phe His Ile Glu Lys Thr Gly  
                   105                  110                  115  
 ccg tta ctg att gag cta cga gga cca wgg aga tcc tgg tcc cca tgg 439  
 Pro Leu Leu Ile Glu Leu Arg Gly Pro Xaa Arg Ser Trp Ser Pro Trp  
                   120                  125                  130  
 ctt tct gag gaa atc tagtggtgac tataggtgtg gggttttgcta cctggaatta 494  
 Leu Ser Glu Glu Ile  
 135  
 gaaatatacc ttctgggatac ttcaatatca ttcttagtac c 535

<210> 4045  
 <211> 419  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 24..365

<400> 4045  
 agtaccceaag cgagccattt aac atg gcg gag gat gtt tcc tca gcg gcc ccg 53  
                                   Met Ala Glu Asp Val Ser Ser Ala Ala Pro  
                                   1                  5                  10  
 agc ccg cgg ggc tgt gcg gat ggt agg gat gcc gac cct act gag gag 101  
 Ser Pro Arg Gly Cys Ala Asp Gly Arg Asp Ala Asp Pro Thr Glu Glu  
                   15                  20                  25  
 cag atg gca gaa aca gag aga aac gac gag gag cag ttc gaa tgc cag 149  
 Gln Met Ala Glu Thr Glu Arg Asn Asp Glu Glu Gln Phe Glu Cys Gln  
                   30                  35                  40  
 gaa ctg ctc gag tgc cag gtg cag gtg ggg gcc ccc gag gag gag gag 197  
 Glu Leu Leu Glu Cys Gln Val Gln Val Gly Ala Pro Glu Glu Glu Glu  
                   45                  50                  55  
 gag gag gag rag gac gcg ggc ctg gtg gcn gag gcc gag gcc gtg gct 245  
 Glu Glu Glu Xaa Asp Ala Gly Leu Val Ala Glu Ala Glu Ala Val Ala  
                   60                  65                  70  
 gcc gcc tgg atg ctc gat ttc ctc tgc ctc tct ctt tgc cga gct ttc 293  
 Ala Gly Trp Met Leu Asp Phe Leu Cys Leu Ser Leu Cys Arg Ala Phe  
                   75                  80                  85                  90  
 cgc gac gcc cgc tcc gag gac ttc cgc aga ccc gca aca gcg cag agg 341  
 Arg Asp Gly Arg Ser Glu Asp Phe Arg Arg Pro Ala Thr Ala Gln Arg  
                   95                  100                  105  
 cta tta ttc atg gac tat cca gtc taacagcttg ccagttgaga acgatataca 395  
 Leu Leu Phe Met Asp Tyr Pro Val  
                   110  
 tatgtcagtt tttgrcaaga attg 419

<210> 4046

<211> 404  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 60..368

<400> 4046  
 atttggaactg acgtccccgcc ctctggctgt ttcttgcccg aggtgggtcg gtagtagcg 59  
 atg gcg ggt ctg act gac ttg cag cgg cta cag gcc cga gtg gaa gag 107  
 Met Ala Gly Leu Thr Asp Leu Gln Arg Leu Gln Ala Arg Val Glu Glu  
 1 5 10 15  
 ctg gag cgc tgg gtg tac ggg ccg gcc ggg gcg cgc gcc tca cgg aag 155  
 Leu Glu Arg Trp Val Tyr Gly Pro Gly Gly Ala Arg Gly Ser Arg Lys  
 20 25 30  
 gtg gct gac gcc ctg gtc aag gtg cag gtg gct ttg ggg aac att tcc 203  
 Val Ala Asp Gly Leu Val Lys Val Gln Val Ala Leu Gly Asn Ile Ser  
 35 40 45  
 agc aag agg gag agg gtg aag att ctc tac aaa aag att gaa gat ctg 251  
 Ser Lys Arg Glu Arg Val Lys Ile Leu Tyr Lys Lys Ile Glu Asp Leu  
 50 55 60  
 atc aag tac ctg gat cct gag tac atc gac cgc att gcc ata cct gat 299  
 Ile Lys Tyr Leu Asp Pro Glu Tyr Ile Asp Arg Ile Ala Ile Pro Asp  
 65 70 75 80  
 gcc tct aag ctg caa ttc atc cta gca gag gag cag ttt atc ctt tcc 347  
 Ala Ser Lys Leu Gln Phe Ile Leu Ala Glu Glu Gln Phe Ile Leu Ser  
 85 90 95  
 can gtt gca ctc ctg agc agg tgaatgcctt ggtgcccatg ctggacagt 398  
 Xaa Val Ala Leu Leu Ser Arg  
 100  
 ctccaca 404

<210> 4047  
 <211> 453  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 70..444

<400> 4047  
 gctagcggtg ccccgctgc tgcggtggca ccagccagga ggcggagtgg aagtggccgt 60  
 ggggcgggt atg gga cta gct gcc gtg tgc gcc ctg aga cgc tca gcg gcc 111  
 Met Gly Leu Ala Gly Val Cys Ala Leu Arg Arg Ser Ala Gly  
 1 5 10  
 tat ata ctc gtc ggt ggg gcc gcc ggt cag tct gcg gca gcg gca gca 159  
 Tyr Ile Leu Val Gly Gly Ala Gly Gly Gln Ser Ala Ala Ala Ala Ala  
 15 20 25 30  
 aga cgg tgc agt gaa gga gag tgg gcg tct gcc ggg gtc cgc agt ttc 207  
 Arg Arg Cys Ser Glu Gly Glu Trp Ala Ser Gly Gly Val Arg Ser Phe

35	40	45	
agc aga gcc gct gca gcc atg gcc cca atc aag gtg gga gat gcc atc			255
Ser Arg Ala Ala Ala Ala Met Ala Pro Ile Lys Val Gly Asp Ala Ile			
50	55	60	
cca gca gtg gag gtg ttt gaa ggg gag cca ggg aac aag gtg aac ctg			303
Pro Ala Val Glu Val Phe Glu Gly Glu Pro Gly Asn Lys Val Asn Leu			
65	70	75	
gca gas ctg ttc aag ggc aag aag ggt gtg ctg ttt gga gtt cct ggg			351
Ala Xaa Leu Phe Lys Gly Lys Lys Gly Val Leu Phe Gly Val Pro Gly			
80	85	90	
gcc ttc acc cct gga tgt tcc aag aca cac ctg cca ggg ttt gtg gag			399
Ala Phe Thr Pro Gly Cys Ser Lys Thr His Leu Pro Gly Phe Val Glu			
95	100	105	
cag gct gag gct ctg aag gcc aag gga gtc cag gtg gtg gct gtc			444
Gln Ala Glu Ala Leu Lys Ala Lys Gly Val Gln Val Val Ala Val			
115	120	125	
tgagtgtta			453
<210> 4048			
<211> 407			
<212> DNA			
<213> Homo sapiens			
<220>			
<221> CDS			
<222> 55..360			
<400> 4048			
agtctctccg gcccggtttc cctcggcgtg ctactgtgcg ctcgatccag cacc atg			57
		Met	
		1	
ggg aag cgg gac aat cgg gtg gcc tat atg aac cca ata gca atg gcg			105
Gly Lys Arg Asp Asn Arg Val Ala Tyr Met Asn Pro Ile Ala Met Ala			
5	10	15	
aga tca agg ggt cca atc cag tct tca ggg cca aca ata cag gat tat			153
Arg Ser Arg Gly Pro Ile Gln Ser Ser Gly Pro Thr Ile Gln Asp Tyr			
20	25	30	
ctg aat cga cca agg cct acc tgg gaa gaa gta aaa gag caa cta gaa			201
Leu Asn Arg Pro Arg Pro Thr Trp Glu Glu Val Lys Glu Gln Leu Glu			
35	40	45	
aag aaa aag aaa ggc tcc aag gct ttg gct gaa ttt gaa gaa aaa atg			249
Lys Lys Lys Lys Gly Ser Lys Ala Leu Ala Glu Phe Glu Glu Lys Met			
50	55	60	
aat gag aac tgg aag aaa gaa ctg gaa aaa cac agg gag aaa ttg tta			297
Asn Glu Asn Trp Lys Lys Glu Leu Glu Lys His Arg Glu Lys Leu Leu			
70	75	80	
agt gga agt gag agc tca tcc aaa aaa aag aca gag aaa gaa aaa aga			345
Ser Gly Ser Glu Ser Ser Ser Lys Lys Lys Thr Glu Lys Glu Lys Arg			
85	90	95	
aaa gaa gaa atc tgg taggggtgagc aaaaattttc catttttcta aacggttaca			400
Lys Glu Glu Ile Trp			
100			
ttaagag			407

<210> 4049  
 <211> 425  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 96..419

<400> 4049  
 atcacgtgga cgctactcgc tatecccggc ctgttggtt cttccgcgct ggagtatcca 60  
 gataggcgac acgccggcgg gcggctgagg cggga atg gct gct gta ctg cag 113  
 Met Ala Ala Val Leu Gln  
 1 5  
 cgc gtc gag cgg ctg tcc aat cga gtc gtg cgt gtg ttg ggc tgt aac 161  
 Arg Val Glu Arg Leu Ser Asn Arg Val Val Arg Val Leu Gly Cys Asn  
 10 15 20  
 ccg ggt ccc atg acc ctc caa ggc acc aac acc tac cta gtg ggg acc 209  
 Pro Gly Pro Met Thr Leu Gln Gly Thr Asn Thr Tyr Leu Val Gly Thr  
 25 30 35  
 ggc ccc agg aga atc ctc att gac act gga gaa cca gca att cca gaa 257  
 Gly Pro Arg Arg Ile Leu Ile Asp Thr Gly Glu Pro Ala Ile Pro Glu  
 40 45 50  
 tac atc agc tgt tta aag cag gct cta act gaa ttt aac aca gca atc 305  
 Tyr Ile Ser Cys Leu Lys Gln Ala Leu Thr Glu Phe Asn Thr Ala Ile  
 55 60 65 70  
 cag gaa att gta gtg act cac tgg cac cga gat cat tct gga ggc ata 353  
 Gln Glu Ile Val Val Thr His Trp His Arg Asp His Ser Gly Gly Ile  
 75 80 85  
 gga gat att tgt aaa agc atc aat aat gac act acc tat tgc atk aaa 401  
 Gly Asp Ile Cys Lys Ser Ile Asn Asn Asp Thr Thr Tyr Cys Xaa Lys  
 90 95 100  
 aaa ctc cca cgg aat ccn tagaga 425  
 Lys Leu Pro Arg Asn Pro  
 105

<210> 4050  
 <211> 452  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 103..408

<400> 4050  
 agtctcwcgc agcgaccgcc gcgggggcaa ggcctggagc tgtgggttcga atttgtgcag 60  
 gcagcgggtg ctggctttta gggcccgccg cctctctgcc ta atg agc tgc acc 114  
 Met Ser Cys Thr  
 1  
 aga atg atc cag gtt tta gat cca cgt cct ttg aca agt tcg gtc atg 162



```

Arg Met Ile Gln Val Leu Asp Pro Arg Pro Leu Thr Ser Ser Val Met
5          10          15          20
ccc gtg gat gtg gcc atg agg ctt tgc ttg gca cat tca cca cct gtg    210
Pro Val Asp Val Ala Met Arg Leu Cys Leu Ala His Ser Pro Pro Val
          25          30          35
aag agt ttc ctg ggc ccg tac gat gaa ttt caa cga cga cat ttt gtg    258
Lys Ser Phe Leu Gly Pro Tyr Asp Glu Phe Gln Arg Arg His Phe Val
          40          45          50
aat aaa tta aag ccc ctg aaa tca tgt ctc aat ata aaa cac aaa gcc    306
Asn Lys Leu Lys Pro Leu Lys Ser Cys Leu Asn Ile Lys His Lys Ala
          55          60          65
aag tct ccc cca aat atc ata tgn nca gat cac tcg ctt cct tta cat    354
Lys Ser Pro Pro Asn Ile Ile Xaa Xaa Asp His Ser Leu Pro Leu His
          70          75          80
ctt cta ccc aaa tac ctt tca gcg agg ctg gcc ctg gct gca gat cta    402
Leu Leu Pro Lys Tyr Leu Ser Ala Arg Leu Ala Leu Ala Ala Asp Leu
          85          90          95          100
aca tcc taataarcct atctatcctc catttcacaa cactccttcc gaca    452
Thr Ser

```

```

<210> 4051
<211> 410
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> CDS
<222> 37..363

```

```

<400> 4051
agtgggacac tgcagggtgc ggggacaact acgaag atg gcg gtt gcg cgc ttg    54
          Met Ala Val Ala Arg Leu
          1          5
gca gct gtg gcg gcc tgg gta cct tgt cgg agc tgg ggc tgg gca gcc    102
Ala Ala Val Ala Ala Trp Val Pro Cys Arg Ser Trp Gly Trp Ala Ala
          10          15          20
gtc ccc ttc ggt ccc cac cgt ggc ctc agc gtg ctg ctt gca cgg ata    150
Val Pro Phe Gly Pro His Arg Gly Leu Ser Val Leu Leu Ala Arg Ile
          25          30          35
cct cag cgg gcg cca cgg tgg ctc cca gct tgt aga caa aag acg tca    198
Pro Gln Arg Ala Pro Arg Trp Leu Pro Ala Cys Arg Gln Lys Thr Ser
          40          45          50
ctc tca ttc ctt aat cga cca gac ctt cca aac ctg gct tat aag aag    246
Leu Ser Phe Leu Asn Arg Pro Asp Leu Pro Asn Leu Ala Tyr Lys Lys
          55          60          65          70
cta aaa ggc aaa agt cca gga att atc ttc atc cct ggc tat ctt tct    294
Leu Lys Gly Lys Ser Pro Gly Ile Ile Phe Ile Pro Gly Tyr Leu Ser
          75          80          85
tat atg aat ggt aca aaa gcg ttg gcg att gag gag ttt tgc aaa tct    342
Tyr Met Asn Gly Thr Lys Ala Leu Ala Ile Glu Glu Phe Cys Lys Ser
          90          95          100
cta ggt cac gcc tgc ata agg taggaacaac acattactga gaaratattg    393
Leu Gly His Ala Cys Ile Arg

```

105  
ctactgttag cattaca

410

<210> 4052  
<211> 432  
<212> DNA  
<213> Homo sapiens

<220>  
<221> CDS  
<222> 11..325

<400> 4052  
agtagacgcc atg atg gat gtg tct ggt gtg ggt ttc cca agc aag gtt 49  
Met Met Asp Val Ser Gly Val Gly Phe Pro Ser Lys Val  
1 5 10  
cct tgg aag aag atg tct gca gag gag ctg gag aat cag tac tgt ccc 97  
Pro Trp Lys Lys Met Ser Ala Glu Glu Leu Glu Asn Gln Tyr Cys Pro  
15 20 25  
agc cga tgg gtt gtc cga ctg gga gca gag gaa gcc ttg agg acc tac 145  
Ser Arg Trp Val Val Arg Leu Gly Ala Glu Glu Ala Leu Arg Thr Tyr  
30 35 40 45  
tca cag ata gga att gaa gcc acc aca agg gcc cgg gcc acc agg aag 193  
Ser Gln Ile Gly Ile Glu Ala Thr Thr Arg Ala Arg Ala Thr Arg Lys  
50 55 60  
agc ctg ctg cat gtc ccc tat gga gac ggc gaa ggg gag aaa gtg gac 241  
Ser Leu Leu His Val Pro Tyr Gly Asp Gly Glu Gly Glu Lys Val Asp  
65 70 75  
att tac ttc ccc gac gag tcg tct gaa gcc ttg cct ttc ttc ctg ttc 289  
Ile Tyr Phe Pro Asp Glu Ser Ser Glu Ala Leu Pro Phe Phe Leu Phe  
80 85 90  
ttt cac gga gga tac tgg cag agc gga aga tta tct tgaaaacaat 335  
Phe His Gly Gly Tyr Trp Gln Ser Gly Arg Leu Ser  
95 100 105  
cttcagtag ttctgacgat acttgagacc tgggccacgt gcatcccacc ttgggaagcc 395  
tctccaaaga gctttcggag ctgacactga cagcttc 432

<210> 4053  
<211> 441  
<212> DNA  
<213> Homo sapiens

<220>  
<221> CDS  
<222> 47..373

<400> 4053  
ckktttyncc tgcacccggg cctgagagtg cagrccttgag ggaagc atg gag gtc 55  
Met Glu Val  
1  
cat ggc aag ccc aag gct agc ccg agt tgt tcg tcg ccc acc cgg gat 103  
His Gly Lys Pro Lys Ala Ser Pro Ser Cys Ser Ser Pro Thr Arg Asp

5	10	15	
tcc tca gga gtc cca gtg tcc aag gag ctg ctg acg gcg gga aag ccg			151
Ser Ser Gly Val Pro Val Ser Lys Glu Leu Leu Thr Ala Gly Lys Pro			
20	25	30	35
acg gcc gcs nga sgY ata tgg gac arg ttg ctc atc aac tcc car cct			199
Thr Ala Ala Xaa Xaa Ile Trp Asp Xaa Leu Leu Ile Asn Ser Gln Pro			
	40	45	50
aag tcc aga aag acc tcc act ctt car rca gtt cgg ata gag agg agt			247
Lys Ser Arg Lys Thr Ser Thr Leu Gln Xaa Val Arg Ile Glu Arg Ser			
	55	60	65
ccc tta ttg gac cag gta cag aca ttt ctc cca cag atg gca cgg gca			295
Pro Leu Leu Asp Gln Val Gln Thr Phe Leu Pro Gln Met Ala Arg Ala			
	70	75	80
aat gaa aag cta aga aaa gaa atg gca gct gca cca cct ggt cgt ttc			343
Asn Glu Lys Leu Arg Lys Glu Met Ala Ala Ala Pro Pro Gly Arg Phe			
	85	90	95
aat att gaa aac nnn gat ggg cct cat aag taaagttata caaatggatg			393
Asn Ile Glu Asn Xaa Asp Gly Pro His Lys			
100	105		
tggttttggt tgagatgaat cagtcggatt caaaagaagt ggacagtt			441

<210> 4054  
 <211> 443  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 107..439

<400> 4054  
 agtgggagag gctccgcccc gtgggtggggc gctttccgtc ggcgtgtgtt ttgggggttgc 60  
 catcggcccg tagtatgtga aaattgtttt tcagaggcac caaata atg tca tct 115  
 Met Ser Ser

gaa atg ttg cca gca ttt att gaa act tct aat gtt gac aaa aag caa			163
Glu Met Leu Pro Ala Phe Ile Glu Thr Ser Asn Val Asp Lys Lys Gln			
5	10	15	
ggc ata aat gaa gat caa gag gag agc cag aag cca aga tta ggt gaa			211
Gly Ile Asn Glu Asp Gln Glu Glu Ser Gln Lys Pro Arg Leu Gly Glu			
20	25	30	35
ggg tgt gaa cca ata tct aaa cga caa atg aaa aaa cta ata aaa cag			259
Gly Cys Glu Pro Ile Ser Lys Arg Gln Met Lys Lys Leu Ile Lys Gln			
	40	45	50
aaa caa tgg gaa gag caa cgg gaa ctc cgc aaa caa aag cgr aaa gaa			307
Lys Gln Trp Glu Glu Gln Arg Glu Leu Arg Lys Gln Lys Arg Lys Glu			
	55	60	65
aaa cgc aag agg aaa aaa tta gag cga caa tgt caa atg grk cca aac			355
Lys Arg Lys Arg Lys Lys Leu Glu Arg Gln Cys Gln Met Xaa Pro Asn			
	70	75	80
tca gat gga cat gac aga aaa cgt gtt cga aga gat gtt gtt cat agc			403
Ser Asp Gly His Asp Arg Lys Arg Val Arg Arg Asp Val Val His Ser			
	85	90	95

acc ttc gcc tta tta ttg act gta gtt ttg atc act tgat 443  
 Thr Phe Ala Leu Leu Leu Thr Val Val Leu Ile Thr  
 100 105 110

<210> 4055  
 <211> 455  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 62..403

<400> 4055  
 atcagattca caaattacta gacaagctct caatgaaatc gagtcacgtc acaaggacat 60  
 c atg aag ctg gag acc agc atc cga gag ttg cat gag atg ttc atg gac 109  
 Met Lys Leu Glu Thr Ser Ile Arg Glu Leu His Glu Met Phe Met Asp  
 1 5 10 15  
 atg gct atg ttt gtg gag act cag ggt gaa atg atc aac aac ata gaa 157  
 Met Ala Met Phe Val Glu Thr Gln Gly Glu Met Ile Asn Asn Ile Glu  
 20 25 30  
 aga aat gtt atg aat gcc aca gac tat gta gaa cac gct aaa gaa gaa 205  
 Arg Asn Val Met Asn Ala Thr Asp Tyr Val Glu His Ala Lys Glu Glu  
 35 40 45  
 aca aaa aaa gct atc aaa tat cag agc aag gca aga agg aaa ttg atg 253  
 Thr Lys Lys Ala Ile Lys Tyr Gln Ser Lys Ala Arg Arg Lys Leu Met  
 50 55 60  
 ttc att att att tgt gta att gtw ttg ctt gtg atc ctt gga att atc 301  
 Phe Ile Ile Ile Cys Val Ile Val Leu Leu Val Ile Leu Gly Ile Ile  
 65 70 75 80  
 cta gca ahc aac att gtc ata gca acc ata tcc caa gag cca ttt atc 349  
 Leu Ala Xaa Asn Ile Val Ile Ala Thr Ile Ser Gln Glu Pro Phe Ile  
 85 90 95  
 ctt gag act cag acc aca tct gca acc aaa tca gca tcc tgt cat ttt 397  
 Leu Glu Thr Gln Thr Thr Ser Ala Thr Lys Ser Ala Ser Cys His Phe  
 100 105 110  
 cgt gaa tgaatycaga cgctgtaacc ggmatcgagt gctgaccttg taatgtatga gt 455  
 Arg Glu

<210> 4056  
 <211> 466  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 106..462

<400> 4056  
 gacacgtcgg gmytggcggc tgcagcsarg ggtcctccga cgctgggctt ccgtgagcgg 60  
 cgctctgccca gatctctgga ccggattcgt cccattctcg tcttc atg gtg gac aag 117  
 Met Val Asp Lys

1

aaa ctg gtg gtg gtt ttc gga ggc aca ggt gcc cag ggt ggc tcc gtg	165
Lys Leu Val Val Val Phe Gly Gly Thr Gly Ala Gln Gly Gly Ser Val	
5 10 15 20	
gcc cgc aca ctc ctg gaa gat ggg aca ttc aag gtt cga gtg gtg acc	213
Ala Arg Thr Leu Leu Glu Asp Gly Thr Phe Lys Val Arg Val Val Thr	
25 30 35	
cga aac cct agg aag aag gca gca aag gag ctg agg ctg caa ggt gca	261
Arg Asn Pro Arg Lys Lys Ala Ala Lys Glu Leu Arg Leu Gln Gly Ala	
40 45 50	
gaa gta gtg cag gga gac caa gat gac cag gtc atc atg gag ctg gcc	309
Glu Val Val Gln Gly Asp Gln Asp Asp Gln Val Ile Met Glu Leu Ala	
55 60 65	
ctg aat ggg gct tac gcc acc ttc atc gtg acc aat tac tgg gag agc	357
Leu Asn Gly Ala Tyr Ala Thr Phe Ile Val Thr Asn Tyr Trp Glu Ser	
70 75 80	
tgc agc cag gag cag gag gtc aag cag ggg aag ctg ctc gct gat ctg	405
Cys Ser Gln Glu Gln Glu Val Lys Gln Gly Lys Leu Leu Ala Asp Leu	
85 90 95 100	
gcc agg cgc ctg ggc ctc cac tat gtg tct aca gcg gcc tgg aga aca	453
Ala Arg Arg Leu Gly Leu His Tyr Val Ser Thr Ala Ala Trp Arg Thr	
105 110 115	
tca aga agc tgac	466
Ser Arg Ser	

<210> 4057  
 <211> 386  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 6..314

<400> 4057

tctca atg ttt ctt att cct tta gga aac agc ctg act ctc ttc tgt atc	50
Met Phe Leu Ile Pro Leu Gly Asn Ser Leu Thr Leu Phe Cys Ile	
1 5 10 15	
tta ttc tat tct ttc cac cat aaa act gca att gca tac ttt tgg gca	98
Leu Phe Tyr Ser Phe His His Lys Thr Ala Ile Ala Tyr Phe Trp Ala	
20 25 30	
agg gct atc atc cag acc tta att ctc caa aca ctt ctg cta ctt atg	146
Arg Ala Ile Ile Gln Thr Leu Ile Leu Gln Thr Leu Leu Leu Leu Met	
35 40 45	
aac tcc tct ctc att gat tgc agg gtt gtg cat tat tat ctt ttc tta	194
Asn Ser Ser Leu Ile Asp Cys Arg Val Val His Tyr Tyr Leu Phe Leu	
50 55 60	
cag gta tcc cag gac cac cct tct gcc tgc cct aca acc aga tac ctt	242
Gln Val Ser Gln Asp His Pro Ser Ala Cys Pro Thr Thr Arg Tyr Leu	
65 70 75	
cag ctt tct cac ttt ctc att crt tct ctt cag cag tct ctc tat ata	290
Gln Leu Ser His Phe Leu Ile Xaa Ser Leu Gln Gln Ser Leu Tyr Ile	
80 85 90 95	

tac tca att gta acc cat tgc att taattcaacc taagttgtta taatcccagt 344  
Tyr Ser Ile Val Thr His Cys Ile

100

tctcttacac caggtccttg ctcacccaca gcattcacat ca 386

<210> 4058

<211> 386

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> 44..358

<400> 4058

attttcggtg tagaagtggc agcacggcag actgggtcaaa caa atg gat ttt aca 55  
Met Asp Phe Thr

1

gag gct tac gcg gac acg tgc tct aca gtt gga ctt gct gcc agg gaa 103  
Glu Ala Tyr Ala Asp Thr Cys Ser Thr Val Gly Leu Ala Ala Arg Glu  
5 10 15 20

ggc aat gtt aaa gtc tta agg aaa ctg ctc aaa aag ggc cga agt gtc 151  
Gly Asn Val Lys Val Leu Arg Lys Leu Leu Lys Lys Gly Arg Ser Val  
25 30 35

gat gtt gct gat aac agg gga tgg atg cca att cat gaa gca gct tat 199  
Asp Val Ala Asp Asn Arg Gly Trp Met Pro Ile His Glu Ala Ala Tyr  
40 45 50

cac aac tct gta gaa tgt ttg caa atg tta att aat gca gat tca tct 247  
His Asn Ser Val Glu Cys Leu Gln Met Leu Ile Asn Ala Asp Ser Ser  
55 60 65

gaa aac tac att aag atg aag acc ttt gaa ggt ttc tgt gct ttg cat 295  
Glu Asn Tyr Ile Lys Met Lys Thr Phe Glu Gly Phe Cys Ala Leu His  
70 75 80

cty ggc tgc aag tca agg aca ttg gaa aat cgt aca gat tct ttt aga 343  
Leu Gly Cys Lys Ser Arg Thr Leu Glu Asn Arg Thr Asp Ser Phe Arg  
85 90 95 100

agc tgg ggc aga tcc taatgcaact actttagrag aaacgaca 386  
Ser Trp Gly Arg Ser

105

<210> 4059

<211> 489

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> 98..460

<400> 4059

acagttgctg agaggaggcg agaggcgggg gcgctagggc cgagatcatg tctgactggg 60  
agaggtttcc ttggcagcag aggacgctag gtttttgg atg aaa gaa gct ggg cag 115

	Met	Lys	Glu	Ala	Gly	Gln	
atg caa aat ctg gag agc gcg agg gcc ggg cgg tca gtc agc acc cag	1				5		163
Met Gln Asn Leu Glu Ser Ala Arg Ala Gly Arg Ser Val Ser Thr Gln							
	10				15	20	
act ggc agc atg acc ggt cag ata cca agg ctt tct aaa gtc aac ctt							211
Thr Gly Ser Met Thr Gly Gln Ile Pro Arg Leu Ser Lys Val Asn Leu							
	25			30		35	
ttc act ctg ctc agc ctc tgg atg gag ctc ttt cca gca gaa gcc cag							259
Phe Thr Leu Leu Ser Leu Trp Met Glu Leu Phe Pro Ala Glu Ala Gln							
	40		45		50		
cgg caa aaa tct cag aaa aat gaa gag gga aag cat gga ccc tta gga							307
Arg Gln Lys Ser Gln Lys Asn Glu Glu Gly Lys His Gly Pro Leu Gly							
	55		60		65	70	
gat aat gaa gag agg acc aga gta tct act gac aaa aga cag gta aag							355
Asp Asn Glu Glu Arg Thr Arg Val Ser Thr Asp Lys Arg Gln Val Lys							
	75		80		85		
aga act ggt ctt gtg gtg gtg aaa aac atg aaa att gtt ggt ctc cac							403
Arg Thr Gly Leu Val Val Val Lys Asn Met Lys Ile Val Gly Leu His							
	90		95		100		
tgt tct agt gaa gat tta cat gcc ggg cag att gct ctt att aaa cat							451
Cys Ser Ser Glu Asp Leu His Ala Gly Gln Ile Ala Leu Ile Lys His							
	105		110		115		
ggg tca rgc tgaaaaactg tgatctttat ttttccaga							489
Gly Ser Xaa							
	120						

<210> 4060  
 <211> 407  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 41..379

<400> 4060	
gaattgattg tggcctgtga acacggagac tccaagtcct atg tat acg agg gaa	55
Met Tyr Thr Arg Glu	
	1 5
gct gcc cac aaa ctg aca ggg aga gga agt tct tca gtt tat gcg ttg	103
Ala Ala His Lys Leu Thr Gly Arg Gly Ser Ser Ser Val Tyr Ala Leu	
	10 15 20
ctt ggg aac tgt gtc tcc gcg gct ggc cag cgc gcg atg ttt ccc ggg	151
Leu Gly Asn Cys Val Ser Ala Ala Gly Gln Arg Ala Met Phe Pro Gly	
	25 30 35
gag gag att gga cag gct gga ctc ccc att gct ttt cta aaa atc ttg	199
Glu Glu Ile Gly Gln Ala Gly Leu Pro Ile Ala Phe Leu Lys Ile Leu	
	40 45 50
gaa act ttg tcc ttc att gaa tta cga cac tgt cca cct tta att tcc	247
Glu Thr Leu Ser Phe Ile Glu Leu Arg His Cys Pro Pro Leu Ile Ser	
	55 60 65
tcg aaa acg cct gta act cgg ctg aag cca tgc ctt gtg ttc agg cgc	295

Ser	Lys	Thr	Pro	Val	Thr	Arg	Leu	Lys	Pro	Cys	Leu	Val	Phe	Arg	Arg	
70					75				80					85		
agt	atg	ggt	cct	cg	cth	aag	gag	cca	gcc	ccg	ctt	ctc	aga	gct	aca	343
Ser	Met	Gly	Pro	Arg	Leu	Lys	Glu	Pro	Ala	Pro	Leu	Leu	Arg	Ala	Thr	
			90					95					100			
ggt	acc	act	ctt	cgg	gag	aat	aca	gct	ccg	att	tct	taactccaga				389
Val	Thr	Thr	Leu	Arg	Glu	Asn	Thr	Ala	Pro	Ile	Ser					
			105					110								
gtttgtcaag	tttagcat															407

<210> 4061  
 <211> 424  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 8..346

<400> 4061																
taaaaaa	atg	ttc	gaa	ata	tgt	tca	ggg	ata	aat	aca	aga	tat	aaa	aac		49
	Met	Phe	Glu	Ile	Cys	Ser	Gly	Ile	Asn	Thr	Arg	Tyr	Lys	Asn		
	1			5					10							
acg	aaa	gca	agc	aca	aaa	caa	aag	caa	ata	tca	gaa	ctt	tcc	caa	aga	97
Thr	Lys	Ala	Ser	Thr	Lys	Gln	Lys	Gln	Ile	Ser	Glu	Leu	Ser	Gln	Arg	
15				20				25						30		
acc	aca	aac	aga	agg	gac	aga	agg	gac	aga	aga	gca	cgt	ctg	ctg	cac	145
Thr	Thr	Asn	Arg	Arg	Asp	Arg	Arg	Asp	Arg	Arg	Ala	Arg	Leu	Leu	His	
			35					40						45		
ttt	aat	aaa	gca	ggg	cta	cca	atg	cta	aat	aca	ctt	atg	gaa	gtg	acc	193
Phe	Asn	Lys	Ala	Gly	Leu	Pro	Met	Leu	Asn	Thr	Leu	Met	Glu	Val	Thr	
			50					55					60			
gaa	cta	aac	cca	ggt	ggc	tcg	gtg	ttt	aat	tta	atg	gcc	agt	tgc	aat	241
Glu	Leu	Asn	Pro	Gly	Gly	Ser	Val	Phe	Asn	Leu	Met	Ala	Ser	Cys	Asn	
		65				70						75				
aca	cag	gtg	gct	gca	ctg	ata	agt	cag	tgg	ttg	aag	ctg	tgc	atc	ccg	289
Thr	Gln	Val	Ala	Ala	Leu	Ile	Ser	Gln	Trp	Leu	Lys	Leu	Cys	Ile	Pro	
	80				85					90						
act	tca	agt	act	aga	aca	ttt	gcc	agt	agc	acc	cag	aac	agg	aaa	gcc	337
Thr	Ser	Ser	Thr	Arg	Thr	Phe	Ala	Ser	Ser	Thr	Gln	Asn	Arg	Lys	Ala	
95				100						105				110		
tca	ggt	cct	tagacagcaa	aagggttaagt	caactgtgtc	aagagccaga										386
Ser	Val	Pro														
gaaatacttg	atattcttaa	atgcatttgt	gtcatagt													424

<210> 4062  
 <211> 430  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 49..411



<400> 4062

```

caatgagccc caaacttttc agtaaaataa aaaaaggatt gatatttt atg aaa cat      57
                                   Met Lys His
                                   1
ttt tat acc cta aaa tgc aga agc atg tta gaa ata tat agt tgc tat      105
Phe Tyr Thr Leu Lys Cys Arg Ser Met Leu Glu Ile Tyr Ser Cys Tyr
   5                               10                               15
cag tct tca att aaa tgt tta cca ctt ggc aaa aat gat act ttg gta      153
Gln Ser Ser Ile Lys Cys Leu Pro Leu Gly Lys Asn Asp Thr Leu Val
  20                               25                               30                               35
aat cca aac atg cct agg tat cca ctc tgt ata ctc cgg aga atg ttc      201
Asn Pro Asn Met Pro Arg Tyr Pro Leu Cys Ile Leu Arg Arg Met Phe
                               40                               45                               50
cta ttt aag ctt att att gtc ttg agc att aag cat ctc aca tca gtt      249
Leu Phe Lys Leu Ile Ile Val Leu Ser Ile Lys His Leu Thr Ser Val
                               55                               60                               65
gtt aca tct ggc ttt aag tct cca awg akm ccc tgg gga act caa tcc      297
Val Thr Ser Gly Phe Lys Ser Pro Xaa Xaa Pro Trp Gly Thr Gln Ser
   70                               75                               80
cat caa agg aat ttc gag agg agt tca cag ctc cta tct acc ata gaa      345
His Gln Arg Asn Phe Glu Arg Ser Ser Gln Leu Leu Ser Thr Ile Glu
   85                               90                               95
ggg aga aac agg ata agg aat aga tcc ctg ata aag cac atg aac aaa      393
Gly Arg Asn Arg Ile Arg Asn Arg Ser Leu Ile Lys His Met Asn Lys
  100                               105                               110                               115
tta aat cca ttg tta att tgagtgactg gcatagaga      430
Leu Asn Pro Leu Leu Ile
                               120

```

<210> 4063

<211> 437

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> 55..399

<400> 4063

```

agtgtgctgg ggtaccaggc gactccggga caggggggtct cggccgtcgg cgtc atg      57
                                   Met
                                   1
gtt tgc cgc gtg cag ctc ccg cct gag atc cag ctg gct cag cgc ctg      105
Val Ser Arg Val Gln Leu Pro Pro Glu Ile Gln Leu Ala Gln Arg Leu
   5                               10                               15
gcg ggg aat gag cag gtg acc cgg gac cgg gcg gtg agg aag ctc cgg      153
Ala Gly Asn Glu Gln Val Thr Arg Asp Arg Ala Val Arg Lys Leu Arg
  20                               25                               30
aaa tac atc gtc gcc agg act cag cgg gcc gca ggt ggt ttt acg cac      201
Lys Tyr Ile Val Ala Arg Thr Gln Arg Ala Ala Gly Gly Phe Thr His
  35                               40                               45

```

```

gac gag ctg ctg aag gtg tgg aaa gga ctg ttt tat tgc atg tgg atg      249
Asp Glu Leu Leu Lys Val Trp Lys Gly Leu Phe Tyr Cys Met Trp Met
50          55          60          65
cag gac aag cca ctc ctc cag gaa gaa tta gga agg act att tcc cag      297
Gln Asp Lys Pro Leu Leu Gln Glu Glu Leu Gly Arg Thr Ile Ser Gln
          70          75          80
ctc gtt cat gct ttt cag acc acg gag gcg cas acc tgt tcc ttc agg      345
Leu Val His Ala Phe Gln Thr Thr Glu Ala Xaa Thr Cys Ser Phe Arg
          85          90          95
cct tct ggc aga cca nka atc gcg agt gga cgg gca ttg aca ggc tgc      393
Pro Ser Gly Arg Pro Xaa Ile Ala Ser Gly Arg Ala Leu Thr Gly Cys
          100          105          110
gct gga taaattctac atgctcatgc ggatggctcct gaacgagt      437
Ala Gly
          115

```

<210> 4064  
 <211> 464  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 12..428

```

<400> 4064
cctcaaaaga r atg gag gnc atg ggt tgt agg ttt tac cac gct gcc tcc      50
          Met Glu Xaa Met Gly Cys Arg Phe Tyr His Ala Ala Ser
          1          5          10
att gca gcc cga gcn gvt agc tac atg gcc tat atg act caa tat cag      98
Ile Ala Ala Arg Ala Xaa Ser Tyr Met Ala Tyr Met Thr Gln Tyr Gln
          15          20          25
cgt aaa ctc tgg gad gac ata gad gat ctg gtt cat gac cca gaa ttt      146
Arg Lys Leu Trp Xaa Asp Ile Xaa Asp Leu Val His Asp Pro Glu Phe
          30          35          40          45
gat cgt ggw arr gca aga tgc ata ata tct gat ggt atg gat gca ggh      194
Asp Arg Gly Xaa Ala Arg Cys Ile Ile Ser Asp Gly Met Asp Ala Gly
          50          55          60
ctt tgg caa ctt tgt act act agg gac ata atg gac tct gta gtc aga      242
Leu Trp Gln Leu Cys Thr Thr Arg Asp Ile Met Asp Ser Val Val Arg
          65          70          75
gtt atg gcc atg gcc ata gac tat aga cgg cag gcc tgg ctt cga ctt      290
Val Met Ala Met Ala Ile Asp Tyr Arg Arg Gln Ala Trp Leu Arg Leu
          80          85          90
aca tct ctc act aag aaa acc cmg gag adg atc tcc cac ttg ccc ttt      338
Thr Ser Leu Thr Lys Lys Thr Xaa Glu Xaa Ile Ser His Leu Pro Phe
          95          100          105
gat ggt amt tcc ctt ttt gga caa gat gtg aaa gct gtt gtt gcw gaa      386
Asp Gly Xaa Ser Leu Phe Gly Gln Asp Val Lys Ala Val Val Ala Glu
          110          115          120          125
gac aac aat atn raa gww aat gac tat naa gat cas raa tac      428
Asp Asn Asn Xaa Xaa Xaa Asn Asp Tyr Xaa Asp Xaa Xaa Tyr
          130          135

```

taataatcag catcgataact tttatagtca tgatca

464

<210> 4065  
<211> 450  
<212> DNA  
<213> Homo sapiens

<220>  
<221> CDS  
<222> 123..446

<400> 4065  
ttacattaaa gaaaagaagg cagcagtgaa agaatttgaa gacaagaagg ttgagctgaa 60  
agagaacctg attgctgagc tagaagaaaa gaagaaaatg attgarmaat gaaaagctga 120  
ca atg gaa ctg act gga gat tct atg gag gtg aaa cct atc atg acc 167  
Met Glu Leu Thr Gly Asp Ser Met Glu Val Lys Pro Ile Met Thr  
1 5 10 15  
ata aag ttg cgg agg cga cca aat gat ccc gtc ccc atc cca gac aag 215  
Ile Lys Leu Arg Arg Arg Pro Asn Asp Pro Val Pro Ile Pro Asp Lys  
20 25 30  
agg agg aaa cct gct cca gcc cag cta aac tat ttg tta aca gat gaa 263  
Arg Arg Lys Pro Ala Pro Ala Gln Leu Asn Tyr Leu Leu Thr Asp Glu  
35 40 45  
cag atc atg gag gat ctg aga aca tta aat aag ctt aag tca ccc aag 311  
Gln Ile Met Glu Asp Leu Arg Thr Leu Asn Lys Leu Lys Ser Pro Lys  
50 55 60  
aga cca gca tct cca tcc tct cct gag cac ttg cct gca aca ccc gcg 359  
Arg Pro Ala Ser Pro Ser Ser Pro Glu His Leu Pro Ala Thr Pro Ala  
65 70 75  
gaa tct cca gcc cag aag ttc gaa gct cgg ata gaa gat ggc aaa ctg 407  
Glu Ser Pro Ala Gln Lys Phe Glu Ala Arg Ile Glu Asp Gly Lys Leu  
80 85 90 95  
tac tat gac caa aga tgg tat gtt atk gga aac ctg gac tagt 450  
Tyr Tyr Asp Gln Arg Trp Tyr Val Xaa Gly Asn Leu Asp  
100 105

<210> 4066  
<211> 458  
<212> DNA  
<213> Homo sapiens

<220>  
<221> CDS  
<222> 112..432

<400> 4066  
accccgcttg tccgcgcgtt gctgcgttgt gaggggtgtc agctcagtg atcccaggca 60  
gctcttagtg tggagcagtg aactgtgtgt ggttccttct acttggggat c atg cag 117  
Met Gln  
1  
aga gct tca cgt ctg aag aga gag ctg cac atg tta gcc aca gag cca 165  
Arg Ala Ser Arg Leu Lys Arg Glu Leu His Met Leu Ala Thr Glu Pro

5	10	15	
ccc cca ggc atc aca tgt tgg caa gat aaa gac caa atg gat gac ctg			213
Pro Pro Gly Ile Thr Cys Trp Gln Asp Lys Asp Gln Met Asp Asp Leu			
20	25	30	
cga gct caa ata tta ggt gga gcc aac aca cct tat gag aaa ggt gtt			261
Arg Ala Gln Ile Leu Gly Gly Ala Asn Thr Pro Tyr Glu Lys Gly Val			
35	40	45	50
ttt aag cta gaa gtk atc att cct gag agg tac cca ttt gaa cct cct			309
Phe Lys Leu Glu Val Ile Ile Pro Glu Arg Tyr Pro Phe Glu Pro Pro			
	55	60	65
cag atc cga ttt ctc act cca att tat cat cca aac att gat tct gct			357
Gln Ile Arg Phe Leu Thr Pro Ile Tyr His Pro Asn Ile Asp Ser Ala			
	70	75	80
gga agg att tgt ctg gat gtt ctc aat tgc cac caa aag gtg ctt gga			405
Gly Arg Ile Cys Leu Asp Val Leu Asn Cys His Gln Lys Val Leu Gly			
	85	90	95
gac cat ccc tca aca tcg caa ctg tgt tgacctctat tcagctgctc atgtca			458
Asp His Pro Ser Thr Ser Gln Leu Cys			
100	105		

<210> 4067  
 <211> 433  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 96..401

<400> 4067	
agccaaaaaa cacacgaaaw aaatgctcac catcactggc catcagagaa atkbaaatca	60
aaaccacagt gagataccat ctcacaccag tdaga atg gca atc act aaa aag	113
	Met Ala Ile Thr Lys Lys
	1 5
tca gga aac aac aga tgc tgg aga gga tgt gga gma ata gga aca ctt	161
Ser Gly Asn Asn Arg Cys Trp Arg Gly Cys Gly Xaa Ile Gly Thr Leu	
	10 15 20
tta cac tgt tgg tgg gac tgt aaa cta gtt caa cca ttg tgg aag tca	209
Leu His Cys Trp Trp Asp Cys Lys Leu Val Gln Pro Leu Trp Lys Ser	
	25 30 35
gtg tgg cga ttc ctc agg cat cta gaa cta grr ata cca ttt gac cca	257
Val Trp Arg Phe Leu Arg His Leu Glu Leu Xaa Ile Pro Phe Asp Pro	
	40 45 50
gcc atc cca tta ctg ggt ata tac cca aag gac tat aaa tca tgc tgc	305
Ala Ile Pro Leu Leu Gly Ile Tyr Pro Lys Asp Tyr Lys Ser Cys Cys	
	55 60 65 70
cat aaa gac aca tgc aca cgt atg trt att gtg gca cta ttc aca ata	353
His Lys Asp Thr Cys Thr Arg Met Xaa Ile Val Ala Leu Phe Thr Ile	
	75 80 85
gca aag act tgg aac caa tcc aaa tgt cca ata atg aat aga ctg gat	401
Ala Lys Thr Trp Asn Gln Ser Lys Cys Pro Ile Met Asn Arg Leu Asp	
	90 95 100
taagaaatgt ggcacatatc accatggaat ac	433

<210> 4068  
 <211> 475  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 104..430

<400> 4068  
 ccacttcctc tcctaccctg cctccttag gccctggcct cctcatctt ctctgggtc 60  
 ccggagcaca ctgagctctt ttccttcaca aggcttgga rgc atg yks ctc sat 115  
 Met Xaa Leu Xaa  
 1  
 ctg cct gra aac ttc tcc ytm agg act cag tac atg agt vac ctc ccc 163  
 Leu Pro Xaa Asn Phe Ser Xaa Arg Thr Gln Tyr Met Ser Xaa Leu Pro  
 5 10 15 20  
 ata gac gct tcc cct gac cct ctg tgt tgg tct gct ctg gct ctc ata 211  
 Ile Asp Ala Ser Pro Asp Pro Leu Cys Trp Ser Ala Leu Ala Leu Ile  
 25 30 35  
 aga aaa tac cag aga ctg agt ggc tta aac aaa aga cat tta ttt tct 259  
 Arg Lys Tyr Gln Arg Leu Ser Gly Leu Asn Lys Arg His Leu Phe Ser  
 40 45 50  
 cac agt cct gga ggc tgg aag tcc aag acc aag gtg ttc gca ggg ttg 307  
 His Ser Pro Gly Gly Trp Lys Ser Lys Thr Lys Val Phe Ala Gly Leu  
 55 60 65  
 gtt tct tct aag gcc tct ctc ctt ggc ttg gag atg gcc ctg gtt ggt 355  
 Val Ser Ser Lys Ala Ser Leu Leu Gly Leu Glu Met Ala Leu Val Gly  
 70 75 80  
 ctt ctg agt gca ggt gtc cct ggt gtc tct ttg tgt gtc cag att ttc 403  
 Leu Leu Ser Ala Gly Val Pro Gly Val Ser Leu Cys Val Gln Ile Phe  
 85 90 95 100  
 tct tat aag gac act ggt gag att gga tgaggggcc ctgacggcct 450  
 Ser Tyr Lys Asp Thr Gly Glu Ile Gly  
 105  
 catcttaatg taatcacctc tctta 475

<210> 4069  
 <211> 454  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 21..353

<400> 4069  
 attttcaact ttaacacagc atg atc gaa aca tac aac caa act tct ccc cga 53  
 Met Ile Glu Thr Tyr Asn Gln Thr Ser Pro Arg  
 1 5 10  
 tct gcg gcc act gga ctg ccc atc agc atg aaa att ttt atg tat tta 101

Ser Ala Ala Thr Gly Leu Pro Ile Ser Met Lys Ile Phe Met Tyr Leu	
15 20 25	
ctt act gtt ttt ctt atc acc cag atg att ggg tca gca ctt ttt gct	149
Leu Thr Val Phe Leu Ile Thr Gln Met Ile Gly Ser Ala Leu Phe Ala	
30 35 40	
gtg tat ctt cat aga agg ttg gac aag ata gar gat gaa agg aat ctt	197
Val Tyr Leu His Arg Arg Leu Asp Lys Ile Glu Asp Glu Arg Asn Leu	
45 50 55	
cat gaa gat ttt gta ttc atg aaa acg ata cag aga tgc aac aca gga	245
His Glu Asp Phe Val Phe Met Lys Thr Ile Gln Arg Cys Asn Thr Gly	
60 65 70 75	
gaa aga tcc tta tcc tta ctg aac tgt gag gag att aaa agc cag ttt	293
Glu Arg Ser Leu Ser Leu Leu Asn Cys Glu Glu Ile Lys Ser Gln Phe	
80 85 90	
gaa ggc ttt gtg aag gat ata atg tta aac aaa gag gag acg aag cww	341
Glu Gly Phe Val Lys Asp Ile Met Leu Asn Lys Glu Glu Thr Lys Xaa	
95 100 105	
aga daa cag ctt tgaratgcaa maaggtgatc agaatcctca aattgcggca	393
Arg Xaa Gln Leu	
110	
catgtcataa gtgaggccag cngtaaaaca acatctgtgt tacagtgggc tgaraaagga	453
t	454
<210> 4070	
<211> 448	
<212> DNA	
<213> Homo sapiens	
<220>	
<221> CDS	
<222> 4..336	
<400> 4070	
aag atg gcg gcg csc ggt aca ggm tcc ggg ttg tgg cgt cct agg agc	48
Met Ala Ala Xaa Gly Thr Gly Ser Gly Leu Trp Arg Pro Arg Ser	
1 5 10 15	
cgc gac ggt ttc tgc cct cgg gca gtg agg ggc agc agc gct tgg ctg	96
Arg Asp Gly Phe Cys Pro Arg Ala Val Arg Gly Ser Ser Ala Trp Leu	
20 25 30	
acc cct gmg gcg tcc cgt agc ctc gcg tta agc ctt gtt cag agc ggg	144
Thr Pro Xaa Ala Ser Arg Ser Leu Ala Leu Ser Leu Val Gln Ser Gly	
35 40 45	
ggc ttt tgc tgt cgc agt ggg ttc cgg aga gtg cag gtg att tcg cag	192
Gly Phe Cys Cys Arg Ser Gly Phe Arg Arg Val Gln Val Ile Ser Gln	
50 55 60	
cag gtt tct tgt gct ggc cgc gct cgc cgg acg aag aag aga agg gca	240
Gln Val Ser Cys Ala Gly Arg Ala Arg Arg Thr Lys Lys Arg Arg Ala	
65 70 75	
gtt ggg cct gcg gcc ttg gcg ttc atg agg cct cag aga gct ccg gag	288
Val Gly Pro Ala Ala Leu Ala Phe Met Arg Pro Gln Arg Ala Pro Glu	
80 85 90 95	
gas tta nca act gtg agg ggg cts cta gag ttc ttc tcc tbb ggt gtg	336
Xaa Leu Xaa Thr Val Arg Gly Leu Leu Glu Phe Phe Ser Xaa Gly Val	

	100	105	110	
tgaghngcag	cctaggaccc	cssgttcggg	gagtcgcaaa	gaaggccgta agggcttcac
ttcctttctcc	ggaggcctgc	cttctgcgcg	tcgattaaca	ccgcattctt tc
				396
				448

<210> 4071  
 <211> 406  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 40..393

<400> 4071	tttcttcaca	gaattggaaa	aaactacttt	aaagttcat	atg gaa cca aaa aag	54
				Met Glu Pro Lys Lys		
				1	5	
	gcc tgc att gcc aag tca atc cta agc caa aag aac aaa gct gga ggc	102				
	Ala Cys Ile Ala Lys Ser Ile Leu Ser Gln Lys Asn Lys Ala Gly Gly					
		10	15	20		
	atc aca cta cct gac ttc aaa cta tac tac aag gct aca gta acc aaa	150				
	Ile Thr Leu Pro Asp Phe Lys Leu Tyr Tyr Lys Ala Thr Val Thr Lys					
		25	30	35		
	aca gca tgg tac tgg tac caa aat aga gat ata gac caa tgg aac aga	198				
	Thr Ala Trp Tyr Trp Tyr Gln Asn Arg Asp Ile Asp Gln Trp Asn Arg					
		40	45	50		
	aca gag ccc tca gaa ata atg ctg cat atc tac aac cat ctg atc ttt	246				
	Thr Glu Pro Ser Glu Ile Met Leu His Ile Tyr Asn His Leu Ile Phe					
		55	60	65		
	gac aga cct gac aaa aac aag aaa tgg gga aag gat tcc cta ttt aat	294				
	Asp Arg Pro Asp Lys Asn Lys Lys Trp Gly Lys Asp Ser Leu Phe Asn					
		70	75	80	85	
	vnw tgg tgc tgg gaa aac tgg cta gcc ata tgt aga aag ctg aaa ctg	342				
	Xaa Trp Cys Trp Glu Asn Trp Leu Ala Ile Cys Arg Lys Leu Lys Leu					
		90	95	100		
	cat ccc ttc ctt aca ctt tat gca aaa tta att caa gat gga tta aag	390				
	His Pro Phe Leu Thr Leu Tyr Ala Lys Leu Ile Gln Asp Gly Leu Lys					
		105	110	115		
	act taaatgtag acc					406
	Thr					

<210> 4072  
 <211> 494  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 38..439

<400> 4072	aacctcttca	aagaggttct	acttaaagtt	ccagggtc	atg aca ttt ttc tgc tgg	55
------------	------------	------------	------------	----------	-------------------------	----

	Met	Thr	Phe	Phe	Cys	Trp	
	1				5		
aat ttg gtt ggg ccc ttg gag ttt tct tac agg aat ttg tcc ctc agc							103
Asn Leu Val Gly Pro Leu Glu Phe Ser Tyr Arg Asn Leu Ser Leu Ser							
	10				20		
agg caa aat att gat tca tgg tgc aaa gat cat agc tac gtg att gct							151
Arg Gln Asn Ile Asp Ser Trp Cys Lys Asp His Ser Tyr Val Ile Ala							
	25				30		
ggg tat tat caa gct aat gag cga gta aag gat gcc agt cca aac cag							199
Gly Tyr Tyr Gln Ala Asn Glu Arg Val Lys Asp Ala Ser Pro Asn Gln							
	40				50		
gtt gca gag aag gtg gcc tcc aga atc gcc gag ggc ttc agc gac act							247
Val Ala Glu Lys Val Ala Ser Arg Ile Ala Glu Gly Phe Ser Asp Thr							
	55				60		
gcg ctc atc atg gta gac aac acc aag ttt acg atg gac tgc gta ggc							295
Ala Leu Ile Met Val Asp Asn Thr Lys Phe Thr Met Asp Cys Val Gly							
	75				80		
cta cga tcc acg tgt acg agc acc atg aga aca gat ggc ggt gca gag							343
Leu Arg Ser Thr Cys Thr Ser Thr Met Arg Thr Asp Gly Gly Ala Glu							
	90				95		
acc cac acc atg act act gtg ara ctg gcc aga ggc acw gwg gat ctc							391
Thr His Thr Met Thr Thr Val Xaa Leu Ala Arg Gly Thr Xaa Asp Leu							
	105				110		
agc cts gct cct gga cag ccg gtc cta cga gac gct cgt gga ttt cga							439
Ser Leu Ala Pro Gly Gln Pro Val Leu Arg Asp Ala Arg Gly Phe Arg							
	120				125		
taaccacctg gacgacattc ggaatgamtg gamaraccga gagatcaata aagct					130		494
<210> 4073							
<211> 456							
<212> DNA							
<213> Homo sapiens							
<220>							
<221> CDS							
<222> 146..451							
<400> 4073							
aagtttgaaa ctgtcaggtt gccgtctagg tagcgggtgt gcttgctgag gctgcacttg							60
ctgacactgc agctgcgacg cggctaagag gcgcagagcg aggartcggg atttggtcgc							120
gagcggcgac gagcatttgt gcaga atg tca tca gat gag gag aaa tac tca							172
	Met	Ser	Ser	Asp	Glu	Glu	Lys
	1				5		
ctt cca gtt gtg caa aat gac tcc agt cga ggc agt tct gtc tct tcg							220
Leu Pro Val Val Gln Asn Asp Ser Ser Arg Gly Ser Ser Val Ser Ser							
	10				15		20
aat ctt cag gaa gaa tat gaa gaa ctg ctt cat tat gct ata gtg act							268
Asn Leu Gln Glu Glu Tyr Glu Glu Leu Leu His Tyr Ala Ile Val Thr							
	30				35		40
cca aat att gaa ccc tgt gct tca cag tca tct cat cct aag gga gaa							316
Pro Asn Ile Glu Pro Cys Ala Ser Gln Ser Ser His Pro Lys Gly Glu							
	45				50		55
ttg gtg cca gat gtc aga att tct aca att cat gat att ctt cat agt							364



Leu	Val	Pro	Asp	Val	Arg	Ile	Ser	Thr	Ile	His	Asp	Ile	Leu	His	Ser	
	60						65					70				
caa	gga	aat	aac	tct	gaa	gta	aga	gaa	act	gca	ata	gaa	gtt	gga	aaa	412
Gln	Gly	Asn	Asn	Ser	Glu	Val	Arg	Glu	Thr	Ala	Ile	Glu	Val	Gly	Lys	
	75					80					85					
gga	tgt	gat	ttc	cat	att	gtc	aag	tca	ttc	aaa	gac	agr	tgagt			456
Gly	Cys	Asp	Phe	His	Ile	Val	Lys	Ser	Phe	Lys	Asp	Arg				
90					95					100						

<210> 4074  
 <211> 431  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 57..419

<400> 4074																
atcagctgat	ttcacttttcg	tttcctaact	tgccagtggc	ccatgacttt	tcagaa	atg										59
						Met										
						1										
agg	ctg	gag	tgc	aat	ggc	acc	atc	ttg	gct	cac	tgc	aac	ctc	cac	ctc	107
Arg	Leu	Glu	Cys	Asn	Gly	Thr	Ile	Leu	Ala	His	Cys	Asn	Leu	His	Leu	
			5					10					15			
ccg	ggt	tca	agt	gat	tct	cct	gcc	tca	gcc	tcc	cga	gta	gct	ggg	att	155
Pro	Gly	Ser	Ser	Asp	Ser	Pro	Ala	Ser	Ala	Ser	Arg	Val	Ala	Gly	Ile	
		20				25					30					
aca	gag	caa	cta	aga	ggc	ctt	tct	tgg	ctc	tat	gag	aac	ctg	gtg	gga	203
Thr	Glu	Gln	Leu	Arg	Gly	Leu	Ser	Trp	Leu	Tyr	Glu	Asn	Leu	Val	Gly	
	35				40				45							
ttc	ctg	aag	ata	aag	tcc	aca	aaa	atg	aag	ctc	cag	aca	aga	cta	tgg	251
Phe	Leu	Lys	Ile	Lys	Ser	Thr	Lys	Met	Lys	Leu	Gln	Thr	Arg	Leu	Trp	
50				55				60						65		
cca	cca	gga	gtt	tct	cac	ttt	caa	gct	agt	gcg	cac	tca	gcc	tct	ggc	299
Pro	Pro	Gly	Val	Ser	His	Phe	Gln	Ala	Ser	Ala	His	Ser	Ala	Ser	Gly	
			70					75					80			
aat	ttg	tta	aaa	tca	ctg	ttt	aag	tgt	tcc	tac	cag	ttt	atg	att	cta	347
Asn	Leu	Leu	Lys	Ser	Leu	Phe	Lys	Cys	Ser	Tyr	Gln	Phe	Met	Ile	Leu	
		85					90					95				
gca	gct	tct	gcc	tca	gac	aag	cag	atc	tca	gca	gtg	act	ccc	tgg	att	395
Ala	Ala	Ser	Ala	Ser	Asp	Lys	Gln	Ile	Ser	Ala	Val	Thr	Pro	Trp	Ile	
		100				105					110					
cgt	ctg	tct	ctt	cag	att	tca	ggg	tagtagttta	ct							431
Arg	Leu	Ser	Leu	Gln	Ile	Ser	Gly									
	115					120										

<210> 4075  
 <211> 413  
 <212> DNA  
 <213> Homo sapiens

<220>

<221> CDS  
<222> 13..318

<400> 4075

```

ccctgtgtct ac atg tgt gta cgt ctg tgt gtg ggc ggg tgt gtg ttt ttc      51
               Met Cys Val Arg Leu Cys Val Gly Gly Cys Val Phe Phe
                1             5             10
tgt aca cct ggg ggg aga ggt atc tgt aaa gtc agt tct ctt ctc tcc      99
Cys Thr Pro Gly Gly Arg Gly Ile Cys Lys Val Ser Ser Leu Leu Ser
   15             20             25
tgt agg gtg gat atg cag cct aca gat atg cac agc ctg cta ctg caa      147
Cys Arg Val Asp Met Gln Pro Thr Asp Met His Ser Leu Leu Leu Gln
   30             35             40             45
ccg cag cca ccg ctg ctg cag ccg ctg cag ccg ctt aca gtg acg gtt      195
Pro Gln Pro Pro Leu Leu Gln Pro Leu Gln Pro Leu Thr Val Thr Val
                50             55             60
atg gca ggg tgt aca cag ccg acc cct acc atg ccc ttg ccc ctg ccg      243
Met Ala Gly Cys Thr Gln Pro Thr Pro Thr Met Pro Leu Pro Leu Pro
                65             70             75
cta gct atg gag ttg gcg ctg tgg cga gtt tat acc gag gtg gct aca      291
Leu Ala Met Glu Leu Ala Leu Trp Arg Val Tyr Thr Glu Val Ala Thr
   80             85             90
gcc gat ttg ccc cct act gaa gtg acg tgagaccct gcaaattggga      338
Ala Asp Leu Pro Pro Thr Glu Val Thr
   95             100
cagcccccca gttcatgagg cctggctatt gcaatattta ctagtagagg actctatagc      398
aagvvtgaag aggta      413

```

<210> 4076  
<211> 435  
<212> DNA  
<213> Homo sapiens

<220>  
<221> CDS  
<222> 12..416

<400> 4076

```

tttaagaagg a atg ctg tca aag tat tca aga cca gat gag ata aaa aca      50
               Met Leu Ser Lys Tyr Ser Arg Pro Asp Glu Ile Lys Thr
                1             5             10
gca aaa aaa atc ttg cct ttg ggt gga tcg ctt gag ctt agg agt tcg      98
Ala Lys Lys Ile Leu Pro Leu Gly Gly Ser Leu Glu Leu Arg Ser Ser
   15             20             25
aga cca gcc tgg gca aca tgg cga aac ccc atc tct aca aag aat aca      146
Arg Pro Ala Trp Ala Thr Trp Arg Asn Pro Ile Ser Thr Lys Asn Thr
   30             35             40             45
aaa ctt agt ggg gcg tgg tgg tgt gag ccg gta gtc cca gct gct gga      194
Lys Leu Ser Gly Ala Trp Trp Cys Glu Pro Val Val Pro Ala Ala Gly
                50             55             60
gag gct ggg gtg gga gga tcg ctt gag ccc agg gag tcg agg ctg cag      242
Glu Ala Gly Val Gly Gly Ser Leu Glu Pro Arg Glu Ser Arg Leu Gln

```

	65		70		75	
tta gcc gtg ttc acg cca cta cat tcc agc ctg ggc cac aga gga aga						290
Leu Ala Val Phe Thr Pro Leu His Ser Ser Leu Gly His Arg Gly Arg						
	80		85		90	
ccc tgt ccc ccc aaa aaa aag aaa aag gaa aaa aaa gtc tgg cct ttt						338
Pro Cys Pro Pro Lys Lys Lys Lys Lys Glu Lys Lys Val Trp Pro Phe						
	95		100		105	
aaa aag cca gac ttc tgt ttg ttt cca atc tat tca atc tct gtc ccc						386
Lys Lys Pro Asp Phe Cys Leu Phe Pro Ile Tyr Ser Ile Ser Val Pro						
110		115		120		125
caa atc ttt tgg cat aga att tgt cta gct tagactaaac cttccatct						435
Gln Ile Phe Trp His Arg Ile Cys Leu Ala						
	130		135			

<210> 4077  
 <211> 348  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 11..340

<400> 4077	
tagaggggatt atg aca aca ggc tct ggc cag gaa cca ggg cag tca ggg	49
Met Thr Thr Gly Ser Gly Gln Glu Pro Gly Gln Ser Gly	
1 5 10	
acc tct ctg agg aca ggt ccc atg ggg tct ctg gga cag gca gag caa	97
Thr Ser Leu Arg Thr Gly Pro Met Gly Ser Leu Gly Gln Ala Glu Gln	
15 20 25	
gtc agc tcg atg ccc atg ggg tct ctg gaa cat gag ggg ctg gta agc	145
Val Ser Ser Met Pro Met Gly Ser Leu Glu His Glu Gly Leu Val Ser	
30 35 40 45	
ctg agg cct gtg ggg ttg cag gaa cag gag ggg ccc atg agc ctg ggg	193
Leu Arg Pro Val Gly Leu Gln Glu Gln Glu Gly Pro Met Ser Leu Gly	
50 55 60	
cct gtg ggg tct gca ggc cca gtg gag acc tct aag ggg ttg ctg ggg	241
Pro Val Gly Ser Ala Gly Pro Val Glu Thr Ser Lys Gly Leu Leu Gly	
65 70 75	
cag gag ggc ctg gtg gaa att gcc atg gac tca cca gag caa gag ggg	289
Gln Glu Gly Leu Val Glu Ile Ala Met Asp Ser Pro Glu Gln Glu Gly	
80 85 90	
ctg gtg ggt ccb atg gag atc acc atg ggg tct ctg gag aag gca ggg	337
Leu Val Gly Pro Met Glu Ile Thr Met Gly Ser Leu Glu Lys Ala Gly	
95 100 105	
ctg tgagccca	348
Leu	
110	

<210> 4078  
 <211> 375  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 4..357

<400> 4078

aag atg gcg tgc ttg ttg gag acc cca atc cgc atg abc ktc ctt tcg	48
Met Ala Cys Leu Leu Glu Thr Pro Ile Arg Met Xaa Xaa Leu Ser	
1 5 10 15	
gaa gta aca gct agc agt cgc cac tat gtt gac agg cta ttt gac cct	96
Glu Val Thr Ala Ser Ser Arg His Tyr Val Asp Arg Leu Phe Asp Pro	
20 25 30	
gat ccc cag aaa gtt cta caa ggt gtc ata gac atg aaa aat gct gta	144
Asp Pro Gln Lys Val Leu Gln Gly Val Ile Asp Met Lys Asn Ala Val	
35 40 45	
att gga aac aac aag cag aaa gcc aat ctc att gtt tta gga gct gtt	192
Ile Gly Asn Asn Lys Gln Lys Ala Asn Leu Ile Val Leu Gly Ala Val	
50 55 60	
cca aga ttg ttg tac ttg ctt cag caa gaa acc tca agc aca gag ctg	240
Pro Arg Leu Leu Tyr Leu Leu Gln Gln Glu Thr Ser Ser Thr Glu Leu	
65 70 75	
aaa act gaa tgt sag tgg tgt tgg gaa gtc ttg cta tgg gta ctg aaa	288
Lys Thr Glu Cys Xaa Trp Cys Trp Glu Val Leu Leu Trp Val Leu Lys	
80 85 90 95	
aca atg tca agt ctc tac tgg act gcc ata tta tcc ctg cct tat tgc	336
Thr Met Ser Ser Leu Tyr Trp Thr Ala Ile Leu Ser Leu Pro Tyr Cys	
100 105 110	
aag gas tac tgt ccc cag acc tgaagtttat tgaagctt	375
Lys Xaa Tyr Cys Pro Gln Thr	
115	

<210> 4079  
 <211> 435  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 31..378

<400> 4079

cagaggtmnn ggatccagaa actagagttc atg ttg gat aag cta cag aat gaa	54
Met Leu Asp Lys Leu Gln Asn Glu	
1 5	
att gat cag gag ttg gaa cac aat aat tcc ctt gtt aga gaa gaa aaa	102
Ile Asp Gln Glu Leu Glu His Asn Asn Ser Leu Val Arg Glu Glu Lys	
10 15 20	
gag aca act gat aca agg aaa aaa tca ctt ctt tct gmt gcc tta gct	150
Glu Thr Thr Asp Thr Arg Lys Lys Ser Leu Leu Ser Xaa Ala Leu Ala	
25 30 35 40	
aaa tca ggt gaa agg cta caa gct cta aca ctt ctt atg att cac tac	198
Lys Ser Gly Glu Arg Leu Gln Ala Leu Thr Leu Leu Met Ile His Tyr	

aga gca ggc att gaa gat ata gaa act tta gaa agt ctg tct tta gac	246
Arg Ala Gly Ile Glu Asp Ile Glu Thr Leu Glu Ser Leu Ser Leu Asp	
60 65 70	
cag cac tcc aaa aaa ata agc aag tac aca gat gat aca gaa gaa gac	294
Gln His Ser Lys Lys Ile Ser Lys Tyr Thr Asp Asp Thr Glu Glu Asp	
75 80 85	
ctt gat aat gaa ata agc caa cta ata gac tct cag cca ttc agc agc	342
Leu Asp Asn Glu Ile Ser Gln Leu Ile Asp Ser Gln Pro Phe Ser Ser	
90 95 100	
ata tca gat gac tta ttt ggc cca tcc gag tct gtg tagcagacag	388
Ile Ser Asp Asp Leu Phe Gly Pro Ser Glu Ser Val	
105 110 115	
gtctattttaa acttttcaaat gaacannngta aagttgcac taaagta	435
 <210> 4080	
<211> 407	
<212> DNA	
<213> Homo sapiens	
 <220>	
<221> CDS	
<222> 37..399	
 <400> 4080	
atttgagttg cttctaactt ttgcctatta taagta atg ctt aca cat tat gct	54
Met Leu Thr His Tyr Ala	
1 5	
tat gag tat tca tcc aca agt ttg tgt gac ata tgt ttt caa tta ttt	102
Tyr Glu Tyr Ser Ser Thr Ser Leu Cys Asp Ile Cys Phe Gln Leu Phe	
10 15 20	
ggg gaa tat att tat gag tta cca att aat gga tca aat gat aac tct	150
Gly Glu Tyr Ile Tyr Glu Leu Pro Ile Asn Gly Ser Asn Asp Asn Ser	
25 30 35	
ctg att gtc aaa ctg tct ccc aaa gtg ctt gta aca ttt ata aac aca	198
Leu Ile Val Lys Leu Ser Pro Lys Val Leu Val Thr Phe Ile Asn Thr	
40 45 50	
tca gta ata tgt aca agt gtt cca ctt tct cca cct cct tgt caa cac	246
Ser Val Ile Cys Thr Ser Val Pro Leu Ser Pro Pro Pro Cys Gln His	
55 60 65 70	
tta ttg ttg tct att ttt ttt tta att tta gcc atc tta gtg gtt atg	294
Leu Leu Leu Ser Ile Phe Phe Leu Ile Leu Ala Ile Leu Val Val Met	
75 80 85	
ata cag tat ttc atg gtg gat ctg ach kgc act tcc cta atg tct aat	342
Ile Gln Tyr Phe Met Val Asp Leu Thr Xaa Thr Ser Leu Met Ser Asn	
90 95 100	
gaa gct gaa cat ctt ttc atg tgc tta ttg gkc att agt gta tct ttt	390
Glu Ala Glu His Leu Phe Met Cys Leu Leu Xaa Ile Ser Val Ser Phe	
105 110 115	
tca aag aaa tagccacc	407
Ser Lys Lys	
120	

<210> 4081  
 <211> 454  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 11..409

<400> 4081  
 acgcggagca atg gyg acc ttt gtg agc gag ctg gag gcg gcc aag aag 49  
 Met Xaa Thr Phe Val Ser Glu Leu Glu Ala Ala Lys Lys  
 1 5 10  
 aac tta agc gag gcc ctg ggg gac aac gtg aaa caa tac tgg gct aac 97  
 Asn Leu Ser Glu Ala Leu Gly Asp Asn Val Lys Gln Tyr Trp Ala Asn  
 15 20 25  
 cta aag ctg tgg ttc aag cag aag atc agc aaa gag gag ttt gac ctt 145  
 Leu Lys Leu Trp Phe Lys Gln Lys Ile Ser Lys Glu Glu Phe Asp Leu  
 30 35 40 45  
 raa gct cat aga ctt ctc aca cag gat aat gtc cat tct cac aat gat 193  
 Xaa Ala His Arg Leu Leu Thr Gln Asp Asn Val His Ser His Asn Asp  
 50 55 60  
 ttc ctc ctg gcc att ctc acg cgt tgt cag att ttg gtt tct aca cca 241  
 Phe Leu Leu Ala Ile Leu Thr Arg Cys Gln Ile Leu Val Ser Thr Pro  
 65 70 75  
 gat ggt gct gga tct ttg cct tgg cca ggg ggt tcc gca gca aaa cct 289  
 Asp Gly Ala Gly Ser Leu Pro Trp Pro Gly Gly Ser Ala Ala Lys Pro  
 80 85 90  
 gga aaa ccc aag gga aag aaa aag ctt tct tct gtt cgt cag anr ktt 337  
 Gly Lys Pro Lys Gly Lys Lys Lys Leu Ser Ser Val Arg Gln Xaa Xaa  
 95 100 105  
 gat cat aga ttc cag cct caa aat cht ctc tca gga gcc cag caa ttt 385  
 Asp His Arg Phe Gln Pro Gln Asn Xaa Leu Ser Gly Ala Gln Gln Phe  
 110 115 120 125  
 gtg gca aag gat ccc caa gat gaa tgacgacttg aaactttgtt cccacacaat 439  
 Val Ala Lys Asp Pro Gln Asp Glu  
 130  
 gatgcttccc actcm 454

<210> 4082  
 <211> 356  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 11..343

<400> 4082  
 taataatttta atg cca gga tat gaa gtt gca aag tat gat ctt ata tgg 49  
 Met Pro Gly Tyr Glu Val Ala Lys Tyr Asp Leu Ile Trp  
 1 5 10

att tgt gat agt gga ata aga gta att cca gat acg ctt act gac atg	97
Ile Cys Asp Ser Gly Ile Arg Val Ile Pro Asp Thr Leu Thr Asp Met	
15 20 25	
gtg aat caa atg aca gaa aaa gta ggc ttg gtt cac ggg ctg cct tac	145
Val Asn Gln Met Thr Glu Lys Val Gly Leu Val His Gly Leu Pro Tyr	
30 35 40 45	
gta gca gac aga cag ggc ttt gct gcc acc tta gag cag atg gag tct	193
Val Ala Asp Arg Gln Gly Phe Ala Ala Thr Leu Glu Gln Met Glu Ser	
50 55 60	
cgc tct gtc gcc cag gct gga gtg cag tgg cgc gat ctc ggc tca ctg	241
Arg Ser Val Ala Gln Ala Gly Val Gln Trp Arg Asp Leu Gly Ser Leu	
65 70 75	
caa gct ccg cct ccc ggg ttc acg cca ttc tcc tgc ctc agc ctc ctg	289
Gln Ala Pro Pro Pro Gly Phe Thr Pro Phe Ser Cys Leu Ser Leu Leu	
80 85 90	
agt agc tgg gac tac agg tgc ccg cca cca tgc ctg gct aat ttt ttg	337
Ser Ser Trp Asp Tyr Arg Cys Pro Pro Pro Cys Leu Ala Asn Phe Leu	
95 100 105	
tat ttt tgatagagac agc	356
Tyr Phe	
110	

<210> 4083  
 <211> 362  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 30..347

<400> 4083	
cttgtggctt tgtctcccg gaagaggag atg gcg gag tcg ttg agg tct ccg	53
Met Ala Glu Ser Leu Arg Ser Pro	
1 5	
cgc cgc tcc ctg tac aaa ctg gtg ggc tcg ccg cct tgg aaa gag gct	101
Arg Arg Ser Leu Tyr Lys Leu Val Gly Ser Pro Pro Trp Lys Glu Ala	
10 15 20	
ttc cgg cag aga tgc ctg gag aga atg aga aac agc cgg gac agg ctc	149
Phe Arg Gln Arg Cys Leu Glu Arg Met Arg Asn Ser Arg Asp Arg Leu	
25 30 35 40	
cta aac agg tac cgc cag gct gga agc agt ggg cca ggg aat tct cag	197
Leu Asn Arg Tyr Arg Gln Ala Gly Ser Ser Gly Pro Gly Asn Ser Gln	
45 50 55	
aac agc ttt cta gtt caa gag gtg atg gaa gaa gag tgg aat gct ttg	245
Asn Ser Phe Leu Val Gln Glu Val Met Glu Glu Glu Trp Asn Ala Leu	
60 65 70	
cag tca gtg gag aat tgt cca gaa gac ttg gct cag ctg gag gag ctg	293
Gln Ser Val Glu Asn Cys Pro Glu Asp Leu Ala Gln Leu Glu Glu Leu	
75 80 85	
ata gac atg gct gtg ctg gag gaa att caa cag gag ctg atc aac caa	341
Ile Asp Met Ala Val Leu Glu Glu Ile Gln Gln Glu Leu Ile Asn Gln	
90 95 100	

ggc ctg tgatacttgg gccaa  
 Gly Leu  
 105

362

<210> 4084

<211> 415

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> 54..404

<400> 4084

tcggtagtaa gctactagct gcttcctcaa aagagaatag ttgtctgcag aga atg	56
Met	
1	
gca tac ctt tgc tcc aaa atc ctg aag atc tac act gtg gtt cat aag	104
Ala Tyr Leu Cys Ser Lys Ile Leu Lys Ile Tyr Thr Val Val His Lys	
5 10 15	
ggg ccc acc aga ggc tcc ata ctg gat ttc tat ctg cca cag aca gtt	152
Gly Pro Thr Arg Gly Ser Ile Leu Asp Phe Tyr Leu Pro Gln Thr Val	
20 25 30	
act tca agc acc agt gag tct tcg ggg ttc aag tgg cta agc agc ttg	200
Thr Ser Ser Thr Ser Glu Ser Ser Gly Phe Lys Trp Leu Ser Ser Leu	
35 40 45	
cat gac agc cta ggc ctg ttg cag acc tct gat gtt ctg gcg tcc att	248
His Asp Ser Leu Gly Leu Leu Gln Thr Ser Asp Val Leu Ala Ser Ile	
50 55 60 65	
caa aac tgg cag gct ttc aga tta gct gta atg gta atg cag tat ata	296
Gln Asn Trp Gln Ala Phe Arg Leu Ala Val Met Val Met Gln Tyr Ile	
70 75 80	
tta ctt tca cta ctg aca tac atg gta ccc ttt ctt aag ggt aga agg	344
Leu Leu Ser Leu Leu Thr Tyr Met Val Pro Phe Leu Lys Gly Arg Arg	
85 90 95	
gcc cag atg cag caa ttt ctt ttt gtc cta aga gaa cta tct cag cat	392
Ala Gln Met Gln Gln Phe Leu Phe Val Leu Arg Glu Leu Ser Gln His	
100 105 110	
gtc cca gac cac taggctccgg v	415
Val Pro Asp His	
115	

<210> 4085

<211> 457

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> 110..448

<400> 4085



ggtgaaagaa gtttgctgac gaagatggcg actgaggcac agagtgaagg ggaggtgcc 60  
 gccgcgaat ccggccggag tgatgccatc tgcagttttg tgatctgca atg att ctt 118  
 Met Ile Leu  
 1  
 ccc ttt cga ggt cag ccc att atc ttt aat cct gac ttt ttt gtg gag 166  
 Pro Phe Arg Gly Gln Pro Ile Ile Phe Asn Pro Asp Phe Phe Val Glu  
 5 10 15  
 aaa ctc cga cat gag aaa cct gag att ttc act gag ttg gtg gtc agc 214  
 Lys Leu Arg His Glu Lys Pro Glu Ile Phe Thr Glu Leu Val Val Ser  
 20 25 30 35  
 aat atc aca agg ctc atc gat tta cct gga act gag ttg gct cag ctg 262  
 Asn Ile Thr Arg Leu Ile Asp Leu Pro Gly Thr Glu Leu Ala Gln Leu  
 40 45 50  
 atg ggg gaa gtg gac ctt aag ttg cct ggc ggg gct ggc cca gca tca 310  
 Met Gly Glu Val Asp Leu Lys Leu Pro Gly Gly Ala Gly Pro Ala Ser  
 55 60 65  
 gga ttc ttc cgg tct ctc atg tct ctc aag cga aag gaa aaa gga gtg 358  
 Gly Phe Phe Arg Ser Leu Met Ser Leu Lys Arg Lys Glu Lys Gly Val  
 70 75 80  
 ata ttt ggg tcc cca ctg acg gag gaa ggc att gcc cag ata tac caa 406  
 Ile Phe Gly Ser Pro Leu Thr Glu Glu Gly Ile Ala Gln Ile Tyr Gln  
 85 90 95  
 ctg att gag tat cta caa aaa ctt gcg agt aga ggg ttt gtt tagagtacc 457  
 Leu Ile Glu Tyr Leu Gln Lys Leu Ala Ser Arg Gly Phe Val  
 100 105 110

<210> 4086  
 <211> 461  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 51..446

<400> 4086  
 ttataccct tttatataat ttggttttat ttgcaggtcc taatctaccc atg gct 56  
 Met Ala  
 1  
 aca gtt gat ata aaa aat cca gaa atc aca aca aat aga ttt tat ggt 104  
 Thr Val Asp Ile Lys Asn Pro Glu Ile Thr Thr Asn Arg Phe Tyr Gly  
 5 10 15  
 cca caa gtc aac aac atc tcc cat acc aag nva aag aag aag gga aaa 152  
 Pro Gln Val Asn Asn Ile Ser His Thr Lys Xaa Lys Lys Lys Gly Lys  
 20 25 30  
 gct aaa aag aag aga tta acc aag gca gat ata gga aca cca agc aat 200  
 Ala Lys Lys Lys Arg Leu Thr Lys Ala Asp Ile Gly Thr Pro Ser Asn  
 35 40 45 50  
 ttc cag cac att gga cat gtt ggt tgg gat cca aat aca ggc ttt gat 248  
 Phe Gln His Ile Gly His Val Gly Trp Asp Pro Asn Thr Gly Phe Asp  
 55 60 65  
 ctg aat aat ttg gat cca gaa ttg aag aat ctt ttc gat atg tgt gga 296  
 Leu Asn Asn Leu Asp Pro Glu Leu Lys Asn Leu Phe Asp Met Cys Gly



<213> Homo sapiens

<220>

<221> CDS

<222> 36..350

<400> 4088

```

ggggcttctc ggcccgaggc agaggaacag ggaag atg gcg gct gtg gtg gag      53
                               Met Ala Ala Val Val Glu
                               1           5
aat gta gtg aag ctc ctt ggg gag cag tac tac aaa gat gcc atg gag      101
Asn Val Val Lys Leu Leu Gly Glu Gln Tyr Tyr Lys Asp Ala Met Glu
          10           15           20
cag tgc cac aat tac aat gct cgc ctc tgt gct gag cgc abg dgh cgc      149
Gln Cys His Asn Tyr Asn Ala Arg Leu Cys Ala Glu Arg Xaa Xaa Arg
          25           30           35
ctg cct ttc ttg gac tca cag acc gga gta gcc cag agc aat tgt tac      197
Leu Pro Phe Leu Asp Ser Gln Thr Gly Val Ala Gln Ser Asn Cys Tyr
          40           45           50
atc tgg atg gaa aag cga cac cgg ggt cca gga ttg gcc tcc gga cag      245
Ile Trp Met Glu Lys Arg His Arg Gly Pro Gly Leu Ala Ser Gly Gln
          55           60           65           70
ctg tac tcc tac cct gcc cgg cgc tgg cgg aaa aag cgg cga gcc cat      293
Leu Tyr Ser Tyr Pro Ala Arg Arg Trp Arg Lys Lys Arg Arg Ala His
          75           80           85
ccc cct gag gat cca cga ctt tcc ttc cca tct att aag cca gac aca      341
Pro Pro Glu Asp Pro Arg Leu Ser Phe Pro Ser Ile Lys Pro Asp Thr
          90           95           100
gac agr ccc tgaagaagga ggggctgmnc tctcaggatg gcagtagttt      390
Asp Arg Pro
          105
agaggctctg ttgcgcactg ac      412

```

<210> 4089

<211> 439

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> 28..366

<400> 4089

```

tagtaagcgt gtaccactct tccatag atg ggt ata ttg gtt gtt cta att ttt      54
                               Met Gly Ile Leu Val Val Leu Ile Phe
                               1           5
aac tac att aat aaa gtc aat ata tta aca atg caa tgg cga att tcc      102
Asn Tyr Ile Asn Lys Val Asn Ile Leu Thr Met Gln Trp Arg Ile Ser
          10           15           20           25
ttg cac atg ccc ctt tat gsc cca sat gtg att att tct tta gta cag      150
Leu His Met Pro Leu Tyr Xaa Pro Xaa Val Ile Ile Ser Leu Val Gln
          30           35           40

```



<211> 471  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 38..454

<400> 4091

```

agacgaagga aacaccccg c agcctgcaca tgctcag atg gag ctc tgg gcc cgc      55
                               1      5
                               Met Glu Leu Trp Ala Arg
ggg ttc tac tgc gca ggc cct cac act cag cag gga ctt gga cgc gaa      103
Gly Phe Tyr Cys Ala Gly Pro His Thr Gln Gln Gly Leu Gly Arg Glu
      10      15      20
agc cct ggt ggc gct cag ccg gtt ggg agt tgt agc ttt ctg gct gct      151
Ser Pro Gly Gly Ala Gln Pro Val Gly Ser Cys Ser Phe Leu Ala Ala
      25      30      35
aca gca gga gat aca ggt ggc caa tgg gtg agc tgg ctg gag gta gga      199
Thr Ala Gly Asp Thr Gly Gly Gln Trp Val Ser Trp Leu Glu Val Gly
      40      45      50
aca agg tta agg aag ctg gga tct tcg tgc aga ctv gat cgt cac tat      247
Thr Arg Leu Arg Lys Leu Gly Ser Ser Cys Arg Leu Asp Arg His Tyr
      55      60      65      70
agc aac aat gaa aca tcg gga agg gct agt tct gct agg cag tct gcc      295
Ser Asn Asn Glu Thr Ser Gly Arg Ala Ser Ser Ala Arg Gln Ser Ala
      75      80      85
att ttc att ctt tca tct ttt ttt tta act caa agc tta ctt tgc aac      343
Ile Phe Ile Leu Ser Ser Phe Phe Leu Thr Gln Ser Leu Leu Cys Asn
      90      95      100
agg cac tgt tct agg cac tgg gga tac aat gga aaa caa aat aga gct      391
Arg His Cys Ser Arg His Trp Gly Tyr Asn Gly Lys Gln Asn Arg Ala
      105      110      115
tct att ttg gcg gga gat cga ctt avt aac tgt gaa cac gtg tca ctg      439
Ser Ile Leu Ala Gly Asp Arg Leu Xaa Asn Cys Glu His Val Ser Leu
      120      125      130
gaa aaa gca gta tgt taataagtaa ctgggct      471
Glu Lys Ala Val Cys
135

```

<210> 4092  
 <211> 454  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 18..419

<400> 4092

```

actattgggc ctggccc atg gcg gaa atg aga gct tgg cgc cca ttg gtc      50
                               Met Ala Glu Met Arg Ala Trp Arg Pro Leu Val

```

004220"666T550

	1	5	10	
cga cct tcc ctg caa tgc gtc aaa ctg ggg cga gcc act gca agg tgg				98
Arg Pro Ser Leu Gln Cys Val Lys Leu Gly Arg Ala Thr Ala Arg Trp				
	15	20	25	
tgg tgg gtg gtc aag gtg aag ccc cac gac aag gat gcn aaa atg aaa				146
Trp Trp Val Val Lys Val Lys Pro His Asp Lys Asp Ala Lys Met Lys				
	30	35	40	
tac cag gag tgc aac aag atc gtg aag cag aag ncc ttt gag cgg gcc				194
Tyr Gln Glu Cys Asn Lys Ile Val Lys Gln Lys Xaa Phe Glu Arg Ala				
	45	50	55	
atc gcg ggc gac gag cac aag cgc tcc gtg gtg gac tcg ctg gac atc				242
Ile Ala Gly Asp Glu His Lys Arg Ser Val Val Asp Ser Leu Asp Ile				
	60	65	70	
gag agc atg acc atc gag ggt gag tac agc gga ccc aag ctt gag gac				290
Glu Ser Met Thr Ile Glu Gly Glu Tyr Ser Gly Pro Lys Leu Glu Asp				
	80	85	90	
gac aaa gtg aca aks acc ttc atg aag ggg ctc atg cag tgg tac aag				338
Asp Lys Val Thr Xaa Thr Phe Met Lys Gly Leu Met Gln Trp Tyr Lys				
	95	100	105	
gac cag aag aaa ctg cac cag aaa atg cgc cta cca ggt tct ggc ccc				386
Asp Gln Lys Lys Leu His Gln Lys Met Arg Leu Pro Gly Ser Gly Pro				
	110	115	120	
ctg gtg gaa gtc ggg cag gca ccc tcc cgg ggc tgacactggg gagcaacatg				439
Leu Val Glu Val Gly Gln Ala Pro Ser Arg Gly				
	125	130		
aagtc aaatt ttcat				454

<210> 4093  
 <211> 433  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 100..411

<400> 4093	
gaggtaattt ccaggctctg gaacacagaa gggattggcc tccctgaaac ctcccagctc	60
aatgaccaga tctccaggca caggaacggg gggcagggg atg gtg aat gac ggg	114
	Met Val Asn Asp Gly
	1 5
gta ttg cct aag gct ggt gca ctg aac tcc aac gat gcc ttt gtt ctg	162
Val Leu Pro Lys Ala Gly Ala Leu Asn Ser Asn Asp Ala Phe Val Leu	
	10 15 20
aaa acc ccc tca gcc gcc tac ctg tgg gtg ggt aca gga gcc agc gag	210
Lys Thr Pro Ser Ala Ala Tyr Leu Trp Val Gly Thr Gly Ala Ser Glu	
	25 30 35
gca gag aag acg ggg gcc cag gag ctg ctc agg gtg ctg cgg gcc caa	258
Ala Glu Lys Thr Gly Ala Gln Glu Leu Leu Arg Val Leu Arg Ala Gln	
	40 45 50
cct gtg cag gtg gca gaa ggc agc gag cca gat ggc ttc tgg gag gcc	306
Pro Val Gln Val Ala Glu Gly Ser Glu Pro Asp Gly Phe Trp Glu Ala	
	55 60 65



caggacatag gc atg ggc aag gac ttc atg tct aaa aca cca aaa gca atg 51  
 Met Gly Lys Asp Phe Met Ser Lys Thr Pro Lys Ala Met  
 1 5 10  
 gca aca aaa gcc aaa att gac aaa tgg gat cta att aaa cta aag agc 99  
 Ala Thr Lys Ala Lys Ile Asp Lys Trp Asp Leu Ile Lys Leu Lys Ser  
 15 20 25  
 tgc tgc aca gca aaa gaa act acc atc aga gtg aac agg caa cct aca 147  
 Cys Cys Thr Ala Lys Glu Thr Thr Ile Arg Val Asn Arg Gln Pro Thr  
 30 35 40 45  
 aaa tgg gag aaa att ttc gca acc tac tta tct gac aaa ggg cta ata 195  
 Lys Trp Glu Lys Ile Phe Ala Thr Tyr Leu Ser Asp Lys Gly Leu Ile  
 50 55 60  
 tcc aga atc tac aat gaa ctc aaa caa att tac aag aaa aaa aac aac 243  
 Ser Arg Ile Tyr Asn Glu Leu Lys Gln Ile Tyr Lys Lys Lys Asn Asn  
 65 70 75  
 ccc atc aaa aag tgg gcg aag gac atg aac aga cac ttc tca aaa gaa 291  
 Pro Ile Lys Lys Trp Ala Lys Asp Met Asn Arg His Phe Ser Lys Glu  
 80 85 90  
 gac att tat gca gcc aaa aaa cac atg aaa aaa tgc tca tca 333  
 Asp Ile Tyr Ala Ala Lys Lys His Met Lys Lys Cys Ser Ser  
 95 100 105  
 tgaccggcca tc 345

<210> 4096  
 <211> 374  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 40..345

<400> 4096  
 caacacctct atgcaaataa actagaaaat ctagaagaa atg gat aaa ttc ctg 54  
 Met Asp Lys Phe Leu  
 1 5  
 gag acg tac acc ctc cca aga cta aac cag gaa gaa gtt gaa tct ctg 102  
 Glu Thr Tyr Thr Leu Pro Arg Leu Asn Gln Glu Glu Val Glu Ser Leu  
 10 15 20  
 cat aga cca ata aca agt tct gah hht gag gca gta att aat agc cta 150  
 His Arg Pro Ile Thr Ser Ser Xaa Xaa Glu Ala Val Ile Asn Ser Leu  
 25 30 35  
 gca acc aaa aaa agt cca gga cca gac gaa ttc tac cag agg tac aaa 198  
 Ala Thr Lys Lys Ser Pro Gly Pro Asp Glu Phe Tyr Gln Arg Tyr Lys  
 40 45 50  
 gag gaa ttg gta cca ttc ctt ctg aaa cta ttg caa aca ata caa aaa 246  
 Glu Glu Leu Val Pro Phe Leu Leu Lys Leu Leu Gln Thr Ile Gln Lys  
 55 60 65  
 gag gga ctc ctt cct aac tca ttt tgt gag gcc agc gtc atc ctg atg 294  
 Glu Gly Leu Leu Pro Asn Ser Phe Cys Glu Ala Ser Val Ile Leu Met  
 70 75 80 85  
 cca aga cct ggc aga gac aca aca aaa wag ama att cca ggc caa tat 342  
 Pro Arg Pro Gly Arg Asp Thr Thr Lys Xaa Xaa Ile Pro Gly Gln Tyr



004220 666E1560

90 95 100 374  
ccc tgatgvacat cgatgccaaa atcctcaat  
Pro

<210> 4097  
<211> 458  
<212> DNA  
<213> Homo sapiens

<220>  
<221> CDS  
<222> 100..429

<400> 4097  
gcaaccagca ctgaccaatt ggaggcatta agggacattc tgcgtgacat cacacccaat 60  
gtgcttttctt ttgcacttga ttttgacgaa gccacaaaa atg att gcg aat gat 114  
Met Ile Ala Asn Asp  
1 5  
gtc cat aca ctc agg aga tct aaa acc act gtt gga cgc cct ttg att 162  
Val His Thr Leu Arg Arg Ser Lys Thr Thr Val Gly Arg Pro Leu Ile  
10 15 20  
gct tgg cga tat gta cct ata aat gtt gtt gag aca ctg aga aca cgt 210  
Ala Trp Arg Tyr Val Pro Ile Asn Val Val Glu Thr Leu Arg Thr Arg  
25 30 35  
ggg gcc ccc acc cgg ata gtg aga aaa gta gcc cgg aac ctg ggc aag 258  
Gly Ala Pro Thr Arg Ile Val Arg Lys Val Ala Arg Asn Leu Gly Lys  
40 45 50  
gcc act tca ggt gtc ctt gtt gtg ctg gat gta gtc aac ctt gtg caa 306  
Ala Thr Ser Gly Val Leu Val Val Leu Asp Val Val Asn Leu Val Gln  
55 60 65  
gac tca ctg gac ttg cac aag ggg gca aaa tcc gag tct gct gag tgc 354  
Asp Ser Leu Asp Leu His Lys Gly Ala Lys Ser Glu Ser Ala Glu Ser  
70 75 80 85  
ctg agg cag tgg gct cag gag ctg gag gag aat ctc aat gag ctc acc 402  
Leu Arg Gln Trp Ala Gln Glu Leu Glu Glu Asn Leu Asn Glu Leu Thr  
90 95 100  
cat atc cat cag agt cta aaa gca ggc taggcccaat tgttgcggga 449  
His Ile His Gln Ser Leu Lys Ala Gly  
105 110  
agtcaggga 458

<210> 4098  
<211> 431  
<212> DNA  
<213> Homo sapiens

<220>  
<221> CDS  
<222> 96..410

<400> 4098  
caaaatcgtg gtttatttct gtaacgtgaa gacttctgct cttttttctt tgtttgtttt 60

```

tttcgtaaac atctgggtgt atatcaaacg gcaag atg tcc agt aat gtc ccg      113
                               Met Ser Ser Asn Val Pro
                               1       5
gcg gat atg ata aat ttg cgc ctc att ttg gta agc gga aaa aca aaa      161
Ala Asp Met Ile Asn Leu Arg Leu Ile Leu Val Ser Gly Lys Thr Lys
              10              15              20
gag ttc ctg ttt tct cct aac gat tct gct tct gac att gca aag cat      209
Glu Phe Leu Phe Ser Pro Asn Asp Ser Ala Ser Asp Ile Ala Lys His
              25              30              35
gta tat gac aat tgg cca atg gac tgg gaa gaa gag cag gtc agc agt      257
Val Tyr Asp Asn Trp Pro Met Asp Trp Glu Glu Glu Gln Val Ser Ser
              40              45              50
cca aat att cta cga ctt att tat caa gga cga ttt cta cat gga aat      305
Pro Asn Ile Leu Arg Leu Ile Tyr Gln Gly Arg Phe Leu His Gly Asn
55              60              65              70
gtc aca tta gga gca tta aaa ctt cct ttt ggc aaa aca aca gtg atg      353
Val Thr Leu Gly Ala Leu Lys Leu Pro Phe Gly Lys Thr Thr Val Met
              75              80              85
cat ttg gtg gcc aga gag aca tta cca gag cca aac tct caa agg tca      401
His Leu Val Ala Arg Glu Thr Leu Pro Glu Pro Asn Ser Gln Arg Ser
              90              95              100
gag gwa tcg tgagaagact ggagagagta a      431
Glu Xaa Ser
              105

```

<210> 4099  
 <211> 455  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 19..435

```

<400> 4099
gctattgcag atcactac atg cag gtg ctt gtt tgt cag cat gaa tgt gtg      51
                               Met Gln Val Leu Val Cys Gln His Glu Cys Val
                               1       5       10
agg gaa ctt gcc acc cgc cct ggc cgc ctc tct ccc atc gag aat ttt      99
Arg Glu Leu Ala Thr Arg Pro Gly Arg Leu Ser Pro Ile Glu Asn Phe
              15              20              25
ctt cct ctg cac tat gat tac cta sag ttt gcc tac tat cga gtt ggt      147
Leu Pro Leu His Tyr Asp Tyr Leu Xaa Phe Ala Tyr Tyr Arg Val Gly
              30              35              40
gag tat gtg aaa gcc ctg gag tgt gcc aaa gcc tat ctt cta tgc cat      195
Glu Tyr Val Lys Ala Leu Glu Cys Ala Lys Ala Tyr Leu Leu Cys His
              45              50              55
cca gat gat gag gat gtc cta gac aat gtg gat tac tat gag agt ctg      243
Pro Asp Asp Glu Asp Val Leu Asp Asn Val Asp Tyr Tyr Glu Ser Leu
60              65              70              75
ctg gat gat agc att gac ccg gca tcc att gag gcc aga gag gat tta      291
Leu Asp Asp Ser Ile Asp Pro Ala Ser Ile Glu Ala Arg Glu Asp Leu
              80              85              90

```

aca atg ttt gtg aaa cgt cat aag ctg gag tct gag ctg ata aaa tca	339
Thr Met Phe Val Lys Arg His Lys Leu Glu Ser Glu Leu Ile Lys Ser	
95 100 105	
gct gca gaa ggt ctg ggg ttt tca tac act gaa ccg aat tat tgg atc	387
Ala Ala Glu Gly Leu Gly Phe Ser Tyr Thr Glu Pro Asn Tyr Trp Ile	
110 115 120	
aga tat gga gga cga cag gat gag aat cgg gtc cct tca gga gtg aas	435
Arg Tyr Gly Gly Arg Gln Asp Glu Asn Arg Val Pro Ser Gly Val Xaa	
125 130 135	
tagagggagc agaagttcat	455

<210> 4100  
 <211> 450  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> CDS  
 <222> 36..401

<400> 4100	
gcggcgccgg cttgctgcca ctgcagagcc ccgcc atg gaa gac acg ccg ttg	53
Met Glu Asp Thr Pro Leu	
1 5	
gtg ata tcg aag cag aag acg gag gtg gtg tgc ggg gtc ccc acc cag	101
Val Ile Ser Lys Gln Lys Thr Glu Val Val Cys Gly Val Pro Thr Gln	
10 15 20	
gtg gtg tgt acg gcc ttc agc agt cac atc ctg gtg gtg gtg acc cag	149
Val Val Cys Thr Ala Phe Ser Ser His Ile Leu Val Val Val Thr Gln	
25 30 35	
ttt ggg aag atg ggc acc ctg gtc tcc ctg gag ccc agc agc gtg gcc	197
Phe Gly Lys Met Gly Thr Leu Val Ser Leu Glu Pro Ser Ser Val Ala	
40 45 50	
agt gac gtc agc aag cct gtg ctc acc aca aaa gtc ctt ctg ggg cag	245
Ser Asp Val Ser Lys Pro Val Leu Thr Thr Lys Val Leu Leu Gly Gln	
55 60 65 70	
gat gag cct ctc atc cat gtc ttt gca aag aac ctg gta gcg ttt gtg	293
Asp Glu Pro Leu Ile His Val Phe Ala Lys Asn Leu Val Ala Phe Val	
75 80 85	
tct caa gaa gct gga aac aga gca gtc ctc ctc gcc gtg gcc gtg aag	341
Ser Gln Glu Ala Gly Asn Arg Ala Val Leu Leu Ala Val Ala Val Lys	
90 95 100	
gac aaa agc atg gag ggg ctg ahn gcg ctg agg gag gtg atc cgg gtg	389
Asp Lys Ser Met Glu Gly Leu Xaa Ala Leu Arg Glu Val Ile Arg Val	
105 110 115	
tgc cag gtg tgg tgactggagg cagccgcccc gcgctgctca gcaggacag	441
Cys Gln Val Trp	
120	
tgaacacca	450

<210> 4101  
 <211> 282  
 <212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -20...-1

<223> score 5

seq LQRFAVL SRGVHS/SV

<400> 4101

Met Phe Ser Lys Leu Ala His Leu Gln Arg Phe Ala Val Leu Ser Arg  
-20 -15 -10 -5  
Gly Val His Ser Ser Val Ala Ser Ala Thr Ser Val Ala Thr Lys Lys  
1 5 10  
Thr Val Gln Gly Pro Pro Thr Ser Asp Asp Ile Phe Glu Arg Glu Tyr  
15 20 25  
Lys Tyr Gly Ala His Asn Tyr Xaa Pro Leu Pro Val Ala Leu Glu Arg  
30 35 40  
Gly Lys Gly Ile Tyr Leu Trp Asp Val Glu Gly Arg Lys Tyr Phe Asp  
45 50 55 60  
Phe Leu Ser Ser Tyr Ser Ala Val Asn Gln Gly His Cys His  
65 70

<210> 4102

<211> 213

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -20...-1

<223> score 3.5

seq WQLVLNVWGKVEA/DI

<400> 4102

Met Gly Leu Ser Asp Gly Glu Trp Gln Leu Val Leu Asn Val Trp Gly  
-20 -15 -10 -5  
Lys Val Glu Ala Asp Ile Pro Gly His Gly Gln Glu Val Leu Ile Arg  
1 5 10  
Leu Phe Lys Gly His Pro Glu Thr Leu Glu Lys Phe Asp Lys Phe Lys  
15 20 25  
His Leu Lys Ser Glu Asp Glu Met Lys Ala Ser Glu Asp Leu Lys Lys  
30 35 40  
His Gly Ala Thr Val Leu Thr  
45 50

<210> 4103

<211> 339

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -20...-1  
 <223> score 3.5  
 seq WQLVLNVWGKVEA/DI

<400> 4103  
 Met Gly Leu Ser Asp Gly Glu Trp Gln Leu Val Leu Asn Val Trp Gly  
 -20 -15 -10 -5  
 Lys Val Glu Ala Asp Ile Pro Gly His Gly Gln Glu Val Leu Ile Arg  
 1 5 10  
 Leu Phe Lys Gly His Pro Glu Thr Leu Glu Lys Phe Asp Lys Phe Lys  
 15 20 25  
 His Leu Lys Ser Glu Asp Glu Met Lys Ala Ser Glu Asp Leu Lys Lys  
 30 35 40  
 His Gly Ala Thr Val Leu Thr Ala Leu Gly Gly Ile Leu Lys Lys Lys  
 45 50 55 60  
 Gly His His Glu Ala Glu Ile Lys Pro Leu Ala Gln Ser His Ala Thr  
 65 70 75  
 Lys His Lys Ile Pro Val Lys Xaa Xaa Gly Val His Leu Gly Met His  
 80 85 90  
 His

<210> 4104  
 <211> 324  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -34...-1  
 <223> score 3.8  
 seq TLFVFISXGSALG/FK

<400> 4104  
 Met Ala Ser Glu Phe Lys Lys Lys Leu Phe Trp Arg Ala Val Val Ala  
 -30 -25 -20  
 Glu Phe Leu Ala Thr Thr Leu Phe Val Phe Ile Ser Xaa Gly Ser Ala  
 -15 -10 -5  
 Leu Gly Phe Lys Tyr Pro Val Gly Xaa Asn Gln Thr Ala Val Gln Asp  
 1 5 10  
 Asn Val Lys Val Ser Leu Ala Phe Gly Leu Ser Ile Ala Thr Leu Ala  
 15 20 25 30  
 Gln Ser Val Gly His Ile Ser Gly Ala His Leu Asn Pro Ala Val Thr  
 35 40 45  
 Leu Gly Leu Leu Leu Ser Cys Gln Ile Ser Ile Phe Arg Xaa Ser Cys  
 50 55 60  
 Thr Ser Ser Pro Ser Ala Trp Gly Pro Ser Ser Pro  
 65 70

<210> 4105  
 <211> 348  
 <212> PRT  
 <213> Homo sapiens

004220"666ET560

<220>  
 <221> SIGNAL  
 <222> -44...-1  
 <223> score 5.5  
 seq ILFFTGWIMIDA/AV

<400> 4105  
 Met Ala Gly Phe Leu Asp Asn Phe Arg Trp Pro Glu Cys Glu Cys Ile  
                     -40                    -35                    -30  
 Asp Trp Ser Glu Arg Arg Asn Ala Val Ala Ser Val Val Ala Gly Ile  
                     -25                    -20                    -15  
 Leu Phe Phe Thr Gly Trp Trp Ile Met Ile Asp Ala Ala Val Val Tyr  
                     -10                    -5                    1  
 Pro Lys Pro Glu Gln Leu Asn His Ala Phe His Thr Cys Gly Val Phe  
 5                    10                    15                    20  
 Ser Thr Leu Ala Phe Phe Met Ile Asn Ala Val Ser Asn Ala Gln Val  
                     25                    30                    35  
 Arg Gly Asp Ser Tyr Glu Ser Gly Cys Leu Gly Arg Thr Gly Ala Arg  
                     40                    45                    50  
 Val Xaa Leu Phe Ile Gly Phe Met Leu Met Phe Gly Ser Leu Ile Ala  
                     55                    60                    65  
 Ser Met Trp Ile  
 70

<210> 4106  
 <211> 300  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 6.2  
 seq WXFLVAIIKGVQC/XX

<400> 4106  
 Met Glu Phe Gly Leu Xaa Trp Xaa Phe Leu Val Ala Ile Ile Lys Gly  
                     -15                    -10                    -5  
 Val Gln Cys Xaa Xaa Xaa Leu Val Glu Ser Gly Gly Xaa Leu Val Lys  
                     1                    5                    10  
 Xaa Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe  
 15                    20                    25  
 Ser Asp Xaa Tyr Met Xaa Trp Ile Arg Gln Ala Pro Gly Lys Gly Leu  
 30                    35                    40                    45  
 Glu Trp Val Ser Tyr Ile Ser Ser Gly Gly Xaa Tyr Thr Asn Tyr Ala  
                     50                    55                    60  
 Asp Ser Xaa Xaa Gly Arg Xaa Xaa Ile Ser Arg Asp Asn Ala Lys Asn  
                     65                    70                    75  
 Ser Leu Tyr Leu  
 80

<210> 4107  
 <211> 378  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 11.7  
 seq VFCLLAVAPGAHS/QV

<400> 4107  
 Met Asp Trp Thr Trp Arg Val Phe Cys Leu Leu Ala Val Ala Pro Gly  
                   -15                  -10                  -5  
 Ala His Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys  
                   1                  5                  10  
 Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe  
           15                  20                  25  
 Thr Ser Xaa Tyr Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Xaa  
 30                  35                  40                  45  
 Glu Trp Met Gly Ile Asn Pro Ser Xaa Gly Ser Thr Xaa Tyr Ala  
                   50                  55                  60  
 Gln Lys Phe Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Thr Ser  
           65                  70                  75  
 Thr Val Tyr Met Xaa Leu Ser Ser Leu Xaa Ser Xaa Asp Thr Ala Val  
           80                  85                  90  
 Tyr Xaa Cys Ala Arg Xaa Ala Tyr Ser Ser Tyr Arg Phe Asp  
       95                  100                  105

<210> 4108  
 <211> 381  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 11  
 seq TLLLLTVPSWVLS/QV

<400> 4108  
 Met Asp Ile Leu Cys Ser Thr Leu Leu Leu Leu Thr Val Pro Ser Trp  
                   -15                  -10                  -5  
 Val Leu Ser Gln Val Thr Leu Arg Glu Ser Gly Pro Ala Leu Val Lys  
                   1                  5                  10  
 Pro Thr Gln Thr Leu Thr Leu Thr Cys Thr Phe Ser Gly Phe Ser Leu  
       15                  20                  25  
 Xaa Thr Ser Gly Met Xaa Val Ser Trp Ile Arg Gln Xaa Pro Gly Lys  
 30                  35                  40                  45  
 Xaa Leu Glu Trp Leu Ala Xaa Ile Asp Trp Xaa Asp Asp Lys Xaa Tyr  
                   50                  55                  60  
 Ser Thr Ser Leu Lys Asn Arg Leu Thr Ile Ser Lys Asp Thr Ser Lys

004220"666ET560

			65					70						75					
Asn	Gln	Val	Val	Leu	Thr	Leu	Ser	Lys	Met	Asp	Pro	Val	Asp	Thr	Ala				
		80						85					90						
Thr	Tyr	Tyr	Cys	Ala	Arg	Ser	Arg	Leu	Val	Pro	His	Asp	His	Trp					
		95					100					105							

<210> 4109  
 <211> 264  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 11  
 seq TLLLLTVPSWVLS/QV

<400> 4109																			
Met	Asp	Ile	Leu	Cys	Ser	Thr	Leu	Leu	Leu	Leu	Thr	Val	Pro	Ser	Trp				
				-15						-10				-5					
Val	Leu	Ser	Gln	Val	Thr	Leu	Xaa	Glu	Ser	Gly	Pro	Ala	Leu	Val	Lys				
		1				5					10								
Pro	Thr	Glu	Thr	Leu	Thr	Leu	Thr	Cys	Thr	Leu	Ser	Gly	Phe	Ser	Leu				
	15				20					25									
Asn	Val	Ser	Gly	Met	Arg	Met	Ile	Trp	Val	Arg	Gln	Phe	Pro	Gly	Gln				
30					35				40						45				
Ala	Leu	Glu	Trp	Leu	Ala	Arg	Ile	Asp	Trp	Asp	Asp	Glu	Lys	Tyr	Phe				
			50					55						60					
Thr	Ser	Ser	Leu	Arg	Thr	Arg	Leu												
			65																

<210> 4110  
 <211> 330  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 10.6  
 seq ILFLVAAXTGAXS/QV

<400> 4110																			
Met	Asp	Trp	Thr	Trp	Ser	Ile	Leu	Phe	Leu	Val	Ala	Ala	Xaa	Thr	Gly				
				-15					-10					-5					
Ala	Xaa	Ser	Gln	Val	Xaa	Leu	Xaa	Gln	Ser	Gly	Xaa	Glu	Val	Lys	Xaa				
		1				5					10								
Pro	Gly	Ala	Ser	Val	Lys	Val	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Xaa	Phe				
	15				20					25									
Xaa	Arg	Tyr	Xaa	Ile	Asn	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu				
30					35				40					45					
Glu	Trp	Met	Gly	Trp	Ile	Ser	Pro	Tyr	Asn	Gly	Asn	Thr	Asn	Tyr	Ala				

004220"666ET560



50                      55                      60  
 Gln Gln Phe Gln Asp Arg Val Thr Leu Thr Thr Asp Thr Ser Thr Ser  
                     65                      70                      75  
 Thr Ala Phe Leu Glu Leu Arg Ser Leu Lys Ser Asp Asp Thr  
                     80                      85                      90

<210> 4111  
 <211> 360  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 10.7  
       seq ILFLVAAATGXHS/QV

<400> 4111  
 Met Asp Trp Thr Trp Ser Ile Leu Phe Leu Val Ala Ala Ala Thr Gly  
                     -15                      -10                      -5  
 Xaa His Ser Gln Val Gln Leu Val Gln Ser Gly Xaa Glu Val Lys Lys  
                     1                      5                      10  
 Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe  
                     15                      20                      25  
 Thr Ser Tyr Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu  
                     30                      35                      40                      45  
 Glu Trp Met Gly Trp Ile Ser Xaa Tyr Asn Gly Asn Thr Asn Tyr Ala  
                     50                      55                      60  
 Gln Xaa Xaa Gln Gly Arg Val Thr Met Thr Xaa Asp Thr Ser Thr Asn  
                     65                      70                      75  
 Thr Ala Tyr Met Xaa Leu Arg Xaa Leu Arg Ser Asp Asp Thr Ala Val  
                     80                      85                      90  
 Tyr Tyr Cys Ala Xaa Arg Gly Leu  
                     95                      100

<210> 4112  
 <211> 396  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 10.8  
       seq ILFLVAAATGAHS/QV

<400> 4112  
 Met Asp Trp Thr Trp Ser Ile Leu Phe Leu Val Ala Ala Ala Thr Gly  
                     -15                      -10                      -5  
 Ala His Ser Gln Val Gln Leu Val Gln Ser Gly Xaa Glu Val Lys Lys  
                     1                      5                      10  
 Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe

004220-6667560

15                      20                      25  
 Thr Xaa Tyr Xaa Ile Xaa Trp Val Arg Gln Ala Pro Gly Gln Gly Leu  
 30                      35                      40                      45  
 Glu Trp Met Gly Trp Ile Ser Ala Tyr Asn Gly Asn Thr Asn Tyr Ala  
                     50                      55                      60  
 Gln Xaa Leu Gln Gly Arg Val Thr Met Thr Xaa Asp Thr Ser Thr Xaa  
                     65                      70                      75  
 Thr Ala Tyr Met Glu Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Xaa  
                     80                      85                      90  
 Tyr Tyr Cys Ala Arg Glu Ile Xaa Val Xaa Xaa Cys Asp Gly Gln Leu  
                     95                      100                      105  
 Gly Pro Gly Asn  
 110

<210> 4113  
 <211> 315  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 9.5  
       seq ILXLVAAXTGAHS/QG

<400> 4113  
 Met Asp Trp Thr Trp Xaa Ile Leu Xaa Leu Val Ala Ala Xaa Thr Gly  
                     -15                      -10                      -5  
 Ala His Ser Gln Gly Gln Xaa Val Gln Ser Gly Ala Glu Val Lys Lys  
                     1                      5                      10  
 Pro Gly Ala Ser Val Lys Val Ser Cys Lys Xaa Ser Gly Tyr Thr Phe  
                     15                      20                      25  
 Thr Tyr Phe Gly Val Ser Xaa Phe Arg Gln Ala Pro Gly Gln Gly Leu  
 30                      35                      40                      45  
 Glu Trp Met Ala Trp Ile Ser Gly His Asn Gly Asp Thr Asn Tyr Ala  
                     50                      55                      60  
 Thr Glu Asp Pro Gly Gln Ser His Pro Asp His Xaa His Ile His Xaa  
                     65                      70                      75  
 His Ser Leu His Gly Ala Xaa Glu Pro  
                     80                      85

<210> 4114  
 <211> 324  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 9.2  
       seq ILFLVAAATGAHS/QL

004220" 66ET360

<400> 4114

```

Met Asp Trp Thr Trp Ser Ile Leu Phe Leu Val Ala Ala Ala Thr Gly
              -15              -10              -5
Ala His Ser Gln Leu Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
              1              5              10
Pro Gly Ala Ser Met Lys Val Ser Cys Gln Ala Ser Asp Tyr Thr Phe
              15              20              25
Leu Asn Phe Gly Ile Thr Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
30              35              40              45
Glu Trp Met Gly Trp Ile Ser Phe His Ser Gly Asn Thr Asn Tyr Ala
              50              55              60
Glu Asn Phe Gln Gly Arg Gly Ala Ile Ser Ala Asp Thr Ser Thr Xaa
              65              70              75
Thr Ala Tyr Ile Glu Val Arg Ser Leu Arg Ser Asp
              80              85

```

<210> 4115

<211> 363

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -19...-1

<223> score 10.8

seq ILFLVAAATGAHS/QV

<400> 4115

```

Met Asp Trp Thr Trp Ser Ile Leu Phe Leu Val Ala Ala Ala Thr Gly
              -15              -10              -5
Ala His Ser Gln Val Gln Leu Val Gln Ser Gly Xaa Glu Val Lys Lys
              1              5              10
Pro Gly Ala Ser Val Lys Val Ser Cys Lys Xaa Ser Gly Tyr Thr Phe
              15              20              25
Thr Ser Tyr Xaa Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
30              35              40              45
Glu Trp Met Gly Trp Ile Ser Xaa Tyr Xaa Gly Xaa Thr Asp Tyr Ala
              50              55              60
Gln Lys Phe Gln Gly Arg Xaa Thr Xaa Thr Thr Asp Thr Ser Thr Asn
              65              70              75
Ile Ala Tyr Met Xaa Leu Arg Asn Leu Arg Ser Asp Asp Thr Ala Phe
              80              85              90
Tyr Tyr Cys Val Arg Gly His Leu Gly
              95              100

```

<210> 4116

<211> 420

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -19...-1

<223> score 10.8  
seq ILFLVAAATGAHS/QV

<400> 4116  
Met Asp Trp Thr Trp Arg Ile Leu Phe Leu Val Ala Ala Ala Thr Gly  
                  -15                  -10                  -5  
Ala His Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys  
                  1                  5                  10  
Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Xaa Phe  
          15                  20                  25  
Thr Xaa Xaa Ala Xaa His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu  
30                  35                  40                  45  
Glu Trp Met Gly Trp Ile Asn Ala Ala Xaa Gly Xaa Thr Xaa Tyr Ser  
                  50                  55                  60  
Gln Xaa Phe Gln Xaa Arg Val Thr Xaa Thr Arg Asp Thr Ser Ala Ser  
                  65                  70                  75  
Thr Val Ser Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val  
          80                  85                  90  
Tyr Phe Cys Ala Arg Asp Trp Glu Ile Ala Val Val Pro Thr Ala Ile  
          95                  100                  105  
Asn Ser Tyr Gly Phe Asp Pro Gly Ala Arg Glu Pro  
110                  115                  120

<210> 4117  
<211> 345  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -19...-1  
<223> score 13.3  
seq LALLLAVLQGVCA/EV

<400> 4117  
Met Gly Ser Thr Ala Ile Leu Ala Leu Leu Leu Ala Val Leu Gln Gly  
                  -15                  -10                  -5  
Val Cys Ala Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys  
                  1                  5                  10  
Pro Gly Glu Ser Leu Lys Ile Ser Cys Lys Gly Val Gly Tyr Asn Phe  
          15                  20                  25  
Ala Gly Trp Trp Ile Gly Trp Val Arg Gln Met Pro Gly Glu Gly Leu  
30                  35                  40                  45  
Glu Leu Met Gly Leu Val Tyr Pro Leu Asp Ser Asn Thr Ala Tyr Ser  
                  50                  55                  60  
Pro Ser Phe Lys Asp His Val Thr Ile Ser Ala Asp Arg Ser Leu Ser  
                  65                  70                  75  
Thr Ala Tyr Leu Gln Trp Ile Ser Leu Lys Pro Arg Thr Pro Pro Tyr  
          80                  85                  90  
Ile Thr Val  
          95

004220" 666E560

<210> 4118  
 <211> 243  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SIGNAL  
 <222> -19..-1  
 <223> score 13.3  
       seq LALLLAVLQGVCA/EV

<400> 4118  
 Met Gly Ser Xaa Ala Ile Leu Ala Leu Leu Leu Ala Val Leu Gln Gly  
                   -15                  -10                  -5  
 Val Cys Ala Glu Val His Leu Val Gln Ser Gly Ala Glu Leu Lys Lys  
           1                  5                  10  
 Pro Gly Glu Ser Leu Thr Ile Ser Cys Lys Gly Ser Gly Tyr Glu Phe  
       15                  20                  25  
 Gly Thr His Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu  
 30                  35                  40                  45  
 Glu Trp Met Gly Ile Tyr Pro Asp Asp Ser Asp Thr Arg Tyr Asn  
                   50                  55                  60  
 Pro

<210> 4119  
 <211> 285  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19..-1  
 <223> score 12.7  
       seq LALLLAVLQGVCG/EE

<400> 4119  
 Met Gly Ser Thr Ala Ile Leu Ala Leu Leu Leu Ala Val Leu Gln Gly  
                   -15                  -10                  -5  
 Val Cys Gly Glu Glu Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys  
           1                  5                  10  
 Pro Gly Glu Ser Leu Arg Ile Ser Cys Thr Gly Ser Gly Tyr Ser Phe  
       15                  20                  25  
 Thr Ser His Trp Ile Gly Trp Val Arg Gln Met Pro Gly Thr Gly Leu  
 30                  35                  40                  45  
 Glu Trp Thr Ala Ile Ile Tyr Pro Asp Asp Ser Asp Thr Lys Xaa Ser  
                   50                  55                  60  
 Pro Ser Phe Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Thr  
           65                  70                  75

<210> 4120  
 <211> 288  
 <212> PRT

004220"666ET560

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -19...-1

<223> score 13.3

seq LALLLAVLQGVCA/EV

<400> 4120

Met	Gly	Ser	Xaa	Ala	Ile	Leu	Ala	Leu	Leu	Leu	Ala	Val	Leu	Gln	Gly
			-15					-10						-5	
Val	Cys	Ala	Glu	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys
		1				5					10				
Pro	Gly	Glu	Ser	Leu	Lys	Ile	Ser	Cys	Lys	Ala	Ser	Gly	Leu	Ser	Leu
	15				20				25						
Ile	Asp	Trp	Val	Gly	Trp	Val	Arg	Gln	Lys	Pro	Gly	Lys	Gly	Leu	Glu
30				35				40						45	
Trp	Met	Gly	Ile	Ile	Tyr	Ile	Gly	Asp	Ser	Asp	Thr	Arg	Tyr	Ser	Pro
			50					55						60	
Ser	Phe	Xaa	Arg	Pro	Gly	His	His	Leu	Ser	Arg	Gln	Val	His	Gln	His
		65						70					75		

<210> 4121

<211> 240

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -19...-1

<223> score 13.3

seq LALLLXVLQGVCA/EV

<400> 4121

Met	Gly	Ser	Ala	Ala	Ile	Leu	Ala	Leu	Leu	Leu	Xaa	Val	Leu	Gln	Gly
			-15					-10						-5	
Val	Cys	Ala	Glu	Val	Gln	Leu	Val	Gln	Ser	Gly	Pro	Glu	Val	Lys	Lys
		1				5					10				
Pro	Gly	Glu	Ser	Leu	Lys	Ile	Ser	Cys	Glu	Val	Ser	Gly	Tyr	Thr	Phe
	15				20				25						
Asn	Phe	Tyr	Trp	Leu	Ala	Trp	Val	Arg	Gln	Arg	Pro	Gly	Lys	Gly	Leu
30				35				40						45	
Glu	Trp	Met	Gly	Ala	Ile	Arg	Pro	Gly	Tyr	Phe	Gly	Ser	Ala	Tyr	Ser
			50					55						60	

<210> 4122

<211> 381

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -19...-1  
 <223> score 9.7  
 seq ILFLVAAATSAHS/QV

<400> 4122  
 Met Asp Trp Thr Trp Arg Ile Leu Phe Leu Val Ala Ala Ala Thr Ser  
                   -15                  -10                  -5  
 Ala His Ser Gln Val Gln Leu Val Gln Ser Gly Thr Glu Val Arg Gly  
                   1                  5                  10  
 Pro Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe  
           15                  20                  25  
 Val Ser Tyr Asp Ile Asn Trp Val Arg Gln Ala Ala Gly Gln Gly Leu  
 30                  35                  40                  45  
 Glu Trp Met Gly Trp Met Asn Pro Phe Ser Gly Asp Ser Gly Phe Ala  
                   50                  55                  60  
 Gln Asn Phe Gln Gly Arg Val Thr Leu Thr Arg Asn Ser Ser Ile Gly  
                   65                  70                  75  
 Thr Ala Tyr Met Glu Leu Thr Ser Leu Arg Ser Asp Asp Thr Ala Val  
           80                  85                  90  
 Tyr Tyr Cys Ala Arg Gly Arg Gly Tyr Thr His Tyr Tyr Phe Phe  
           95                  100                  105

<210> 4123  
 <211> 309  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 10.6  
 seq TLLLLTXPSWVLS/QX

<400> 4123  
 Met Asp Thr Leu Cys Xaa Thr Leu Leu Leu Leu Thr Xaa Pro Ser Trp  
                   -15                  -10                  -5  
 Val Leu Ser Gln Xaa Thr Leu Lys Glu Xaa Gly Pro Xaa Leu Val Xaa  
                   1                  5                  10  
 Pro Thr Gln Thr Leu Thr Leu Thr Cys Thr Phe Ser Gly Phe Ser Leu  
           15                  20                  25  
 Arg Thr Ser Gly Glu Gly Val Gly Trp Ile Arg Gln Pro Pro Gly Lys  
 30                  35                  40                  45  
 Ala Leu Glu Trp Leu Ala Leu Ile Tyr Trp Asp Asp Asp Lys Arg Tyr  
                   50                  55                  60  
 Arg Pro Ser Leu Lys Thr Arg Leu Thr Ile Thr Lys Asp Thr Ser Lys  
           65                  70                  75  
 Asn Gln Val Val Leu Thr Met  
           80

<210> 4124  
 <211> 258  
 <212> PRT

004220-000000

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -19...-1

<223> score 10.7

seq TLLLLLTPSWVLS/QV

<400> 4124

Met Asp Thr Leu Cys Tyr Thr Leu Leu Leu Leu Thr Thr Pro Ser Trp  
                  -15                  -10                  -5  
Val Leu Ser Gln Val Thr Leu Lys Glu Ser Gly Pro Val Leu Val Lys  
                  1                  5                  10  
Pro Thr Glu Thr Leu Thr Leu Thr Cys Thr Val Ser Gly Phe Ser Leu  
          15                  20                  25  
Asn Asn Ala Gly Met Gly Val Ser Trp Val Arg Gln Pro Pro Gly Lys  
30                  35                  40                  45  
Ala Leu Glu Trp Leu Ala His Glu Tyr Pro His Asp Gln Arg Ser Tyr  
                  50                  55                  60  
Asn Thr Ser Leu Ser Gly  
                  65

<210> 4125

<211> 297

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -19...-1

<223> score 10.8

seq ILFLVAAATGAHS/QV

<400> 4125

Met Asp Trp Thr Trp Arg Ile Leu Phe Leu Val Ala Ala Ala Thr Gly  
                  -15                  -10                  -5  
Ala His Ser Gln Val Xaa Leu Xaa Gln Ser Gly Ala Glu Val Lys Xaa  
                  1                  5                  10  
Pro Gly Ala Ser Val Lys Val Ser Cys Lys Xaa Ser Gly Tyr Xaa Phe  
          15                  20                  25  
Xaa Xaa Tyr Tyr Ile His Trp Xaa Arg Gln Ala Pro Gly Gln Gly Leu  
30                  35                  40                  45  
Glu Trp Met Gly Arg Xaa Asn Pro Lys Asp Gly Ala Pro Asn Tyr Ala  
                  50                  55                  60  
Pro Asn Phe Glu Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Thr  
                  65                  70                  75  
Thr Ala Tyr  
                  80

<210> 4126

<211> 357

<212> PRT



<213> Homo sapiens

<220>

<221> SIGNAL

<222> -19...-1

<223> score 10.8

seq ILFLXAAATGAHS/QV

<400> 4126

Met	Asp	Trp	Thr	Trp	Arg	Ile	Leu	Phe	Leu	Xaa	Ala	Ala	Ala	Thr	Gly
				-15					-10					-5	
Ala	His	Ser	Gln	Val	Arg	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys
			1			5					10				
Pro	Gly	Ala	Ser	Val	Lys	Val	Ser	Cys	Lys	Xaa	Ser	Gly	Tyr	Xaa	Xaa
	15				20				25						
Thr	Gly	Xaa	Xaa	Xaa	His	Trp	Leu	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu
30					35				40						45
Glu	Trp	Met	Gly	Xaa	Ile	Asn	Pro	Arg	Thr	Gly	Gly	Thr	Lys	Ser	Ala
			50					55					60		
Gln	Lys	Xaa	Arg	Asp	Phe	Leu	Thr	Met	Thr	Arg	Asp	Ala	Pro	Xaa	Asn
			65				70					75			
Thr	Ala	Xaa	Met	Glu	Leu	Thr	Gly	Leu	Arg	Xaa	Xaa	Glu	Thr	Ala	Thr
	80						85					90			
Tyr	Phe	Cys	Ala	Arg	Xaa	Gln									
	95					100									

<210> 4127

<211> 297

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -19...-1

<223> score 9.6

seq FLFVVAATGVQS/QX

<400> 4127

Met	Asp	Trp	Thr	Trp	Arg	Phe	Leu	Phe	Val	Val	Ala	Ala	Ala	Thr	Gly
				-15					-10					-5	
Val	Gln	Ser	Gln	Xaa	Gln	Leu	Xaa	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys
			1			5					10				
Pro	Gly	Ser	Ser	Val	Lys	Val	Ser	Cys	Glu	Ala	Ser	Gly	Tyr	Thr	Phe
	15				20				25						
Ser	Asn	Tyr	Ala	Val	Ser	Trp	Phe	Gln	Gly	Arg	Val	Thr	Ile	Thr	Ala
30					35				40						45
Asp	Glu	Ser	Thr	Thr	Val	Tyr	Met	Gln	Leu	Ser	Ser	Leu	Thr	Ser	
			50				55					60			
Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Arg	Glu	Ala	Arg	Glu	Trp	Gln
			65				70					75			
Trp	Leu	Val													
	80														

<210> 4128  
 <211> 306  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 9.6  
 seq FLFVVAAATGVQS/QX

<400> 4128  
 Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly  
                   -15                  -10                  -5  
 Val Gln Ser Gln Xaa Gln Leu Xaa Gln Ser Gly Ala Glu Val Lys Lys  
                   1                  5                  10  
 Pro Gly Ser Ser Val Lys Val Ser Cys Glu Ala Ser Gly Tyr Thr Phe  
           15                  20                  25  
 Ser Asn Tyr Ala Val Ser Trp Phe Gln Gly Arg Val Thr Ile Thr Ala  
 30                  35                  40                  45  
 Asp Glu Ser Thr Thr Thr Val Tyr Met Gln Leu Ser Ser Leu Thr Ser  
                   50                  55                  60  
 Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Asp Ser Ala Ser Val Val  
           65                  70                  75  
 Met Ala Asn Gly Leu Gly  
           80

<210> 4129  
 <211> 429  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 9.9  
 seq FLFVVAAATGVQS/QV

<400> 4129  
 Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly  
                   -15                  -10                  -5  
 Val Gln Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys  
                   1                  5                  10  
 Pro Gly Ser Ser Val Xaa Val Xaa Cys Lys Ala Ser Gly Gly Xaa Xaa  
           15                  20                  25  
 Xaa Ser Tyr Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu  
 30                  35                  40                  45  
 Glu Trp Met Gly Gly Ile Xaa Pro Xaa Xaa Gly Thr Xaa Asn Xaa Ala  
                   50                  55                  60  
 Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Asn  
           65                  70                  75

004220"666ET560

Thr Val Tyr Met Glu Leu Asn Ser Leu Xaa Ser Xaa Xaa Thr Ala Val  
80 85 90  
Tyr Xaa Xaa Ala Ser Arg Val Val Ala Gly Gly Leu Val Phe Tyr Ala  
95 100 105  
Xaa Asp Xaa Trp Gly Gln Gly Pro Arg Ser Pro Ser Pro Gln Leu  
110 115 120

<210> 4130  
<211> 363  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -19..-1  
<223> score 9.9  
seq FLFVVAATGVQS/QV

<400> 4130  
Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly  
-15 -10 -5  
Val Gln Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys  
1 5 10  
Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe  
15 20 25  
Xaa Xaa Tyr Xaa Xaa Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu  
30 35 40 45  
Glu Trp Met Gly Gly Ile Ile Pro Ile Phe Gly Xaa Thr Asn Tyr Ala  
50 55 60  
Gln Lys Phe Gln Gly Arg Val Thr Met Thr Ala Asp Glu Ser Thr Thr  
65 70 75  
Thr Val Tyr Met Glu Leu Ser Arg Leu Thr Ser Glu Asp Thr Ala Val  
80 85 90  
Tyr Tyr Cys Ala Arg Asp Ile Asn Arg  
95 100

<210> 4131  
<211> 348  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -19..-1  
<223> score 9.6  
seq FLFVVAATGVQS/QX

<400> 4131  
Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly  
-15 -10 -5  
Val Gln Ser Gln Xaa Gln Leu Xaa Gln Ser Gly Ala Glu Val Lys Lys  
1 5 10

Pro Gly Ser Ser Val Lys Val Ser Cys Glu Ala Ser Gly Tyr Thr Phe  
 15 20 25  
 Ser Asn Tyr Ala Val Ser Trp Phe Gln Gly Arg Val Thr Ile Thr Ala  
 30 35 40 45  
 Asp Glu Ser Thr Asn Thr Val Tyr Met Glu Leu Asn Ser Leu Xaa Ser  
 50 55 60  
 Xaa Xaa Thr Ala Val Tyr Xaa Xaa Ala Ser Arg Val Val Ala Gly Gly  
 65 70 75  
 Leu Val Phe Tyr Ala Xaa Asp Xaa Trp Gly Gln Gly Pro Arg Ser Pro  
 80 85 90  
 Ser Pro Gln Leu  
 95

<210> 4132  
 <211> 345  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 9.6  
 seq FLFVVAAATGVQS/QX

<400> 4132  
 Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly  
 -15 -10 -5  
 Val Gln Ser Gln Xaa Gln Leu Xaa Gln Ser Gly Ala Glu Val Lys Lys  
 1 5 10  
 Pro Gly Ser Ser Val Lys Val Ser Cys Glu Ala Ser Gly Tyr Thr Phe  
 15 20 25  
 Ser Asn Tyr Ala Val Ser Trp Phe Gln Gly Arg Val Thr Ile Thr Ala  
 30 35 40 45  
 Asp Xaa Ser Thr Xaa Thr Xaa Tyr Met Glu Leu Ser Ser Leu Arg Ser  
 50 55 60  
 Glu Asp Thr Ala Xaa Tyr Tyr Cys Ala Arg Gly Gln Ala Pro Gly Arg  
 65 70 75  
 Val Val Val Pro Leu Phe Leu Trp Gly Gln Gly Thr Trp Ser Pro Ser  
 80 85 90  
 Pro Gln Pro  
 95

<210> 4133  
 <211> 387  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 9.9  
 seq FLFVVAAATGVQS/QV

&lt;400&gt; 4133

```

Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly
               -15               -10               -5
Val Gln Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
              1              5              10
Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe
       15              20              25
Ser Asn Tyr Ala Xaa Xaa Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
30              35              40              45
Glu Trp Met Gly Xaa Ile Thr Pro Ile Xaa Gly Thr Ala Xaa Tyr Xaa
              50              55              60
Gln Lys Phe Gln Gly Arg Ile Thr Ile Thr Ala Asp Glu Ser Thr Ser
              65              70              75
Thr Ala Tyr Met Glu Leu Thr Gly Leu Lys Ser Asp Asp Thr Ala Val
              80              85              90
Tyr Tyr Cys Ala Arg Asp Ser Ala Ser Val Val Met Ala Asn Gly Leu
       95              100              105
Gly
110

```

&lt;210&gt; 4134

&lt;211&gt; 378

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SIGNAL

&lt;222&gt; -19...-1

&lt;223&gt; score 9.9

seq FLFVVAATGVQS/QV

&lt;400&gt; 4134

```

Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly
               -15               -10               -5
Val Gln Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
              1              5              10
Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Thr Phe
       15              20              25
Asn Xaa Tyr Ala Ile Ser Trp Val Arg Gln Ala Pro Xaa Gln Gly Leu
30              35              40              45
Glu Trp Met Gly Gly Xaa Thr Pro Ile Phe Gly Thr Xaa Xaa Tyr Ala
              50              55              60
Gln Xaa Phe Gln Gly Arg Xaa Xaa Ile Thr Ala Asp Glu Ser Thr Ser
              65              70              75
Arg Val Tyr Met Glu Leu Ser Ser Pro Arg Ser Glu Asp Thr Ala Val
              80              85              90
Tyr Tyr Cys Val Ser Ser Ser Thr Glu Cys Gly Arg Asp Cys
       95              100              105

```

&lt;210&gt; 4135

&lt;211&gt; 282

&lt;212&gt; PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -19...-1

<223> score 9.6

seq FLFVVAAATGVQS/QX

<400> 4135

Met	Asp	Trp	Thr	Trp	Arg	Phe	Leu	Phe	Val	Val	Ala	Ala	Ala	Thr	Gly
				-15					-10					-5	
Val	Gln	Ser	Gln	Xaa	Gln	Leu	Xaa	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys
		1				5					10				
Pro	Gly	Ser	Ser	Val	Lys	Val	Ser	Cys	Glu	Ala	Ser	Gly	Tyr	Thr	Phe
	15				20					25					
Ser	Asn	Tyr	Ala	Val	Ser	Trp	Phe	Gln	Gly	Arg	Val	Thr	Ile	Thr	Ala
30				35					40					45	
Asp	Glu	Ser	Thr	Thr	Thr	Val	Tyr	Met	Glu	Leu	Ser	Arg	Leu	Thr	Ser
			50					55					60		
Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Arg	Asp	Ile	Asn	Arg		
	65						70						75		

<210> 4136

<211> 297

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -19...-1

<223> score 9.6

seq FLFVVAAATGVQS/QX

<400> 4136

Met	Asp	Trp	Thr	Trp	Arg	Phe	Leu	Phe	Val	Val	Ala	Ala	Ala	Thr	Gly
				-15					-10					-5	
Val	Gln	Ser	Gln	Xaa	Gln	Leu	Xaa	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys
		1				5					10				
Pro	Gly	Ser	Ser	Val	Lys	Val	Ser	Cys	Glu	Ala	Ser	Gly	Tyr	Thr	Phe
	15				20					25					
Ser	Asn	Tyr	Ala	Val	Ser	Trp	Phe	Gln	Gly	Arg	Val	Thr	Ile	Thr	Ala
30				35					40					45	
Asp	Glu	Ser	Thr	Ser	Arg	Val	Tyr	Met	Glu	Leu	Ser	Ser	Pro	Arg	Ser
			50					55					60		
Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys	Val	Ser	Ser	Ser	Thr	Glu	Cys	Gly
	65						70						75		
Arg	Asp	Cys													
	80														

<210> 4137

<211> 312

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -19...-1

<223> score 8.3

seq FLFVVAAATXVQS/QX

<400> 4137

Met	Asp	Trp	Thr	Trp	Arg	Phe	Leu	Phe	Val	Val	Ala	Ala	Ala	Thr	Xaa
				-15					-10					-5	
Val	Gln	Ser	Gln	Xaa	Gln	Leu	Val	Gln	Ser	Gly	Xaa	Glu	Val	Lys	Xaa
		1				5						10			
Pro	Gly	Ser	Ser	Val	Lys	Val	Ser	Cys	Lys	Xaa	Ser	Gly	Gly	Xaa	Xaa
	15				20					25					
Ser	Xaa	Asn	Xaa	Ile	Xaa	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu
30				35					40						45
Glu	Trp	Met	Gly	Arg	Ile	Ile	Pro	Met	Val	Glu	Lys	Ala	Asp	Thr	Ala
				50				55						60	
Gln	Lys	Phe	Gln	Gly	Arg	Leu	Thr	Ile	Ser	Thr	Xaa	Leu	Ser	Thr	Ser
			65				70						75		
Xaa	Xaa	Phe	Met	Glu	Leu	Ser	Ser								
		80					85								

<210> 4138

<211> 378

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -19...-1

<223> score 9.4

seq FLFVVAAATGVQS/QX

<400> 4138

Met	Asp	Trp	Thr	Trp	Arg	Phe	Leu	Phe	Val	Val	Ala	Ala	Ala	Thr	Gly
				-15					-10					-5	
Val	Gln	Ser	Gln	Xaa	Xaa	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys
		1				5						10			
Pro	Gly	Ser	Ser	Val	Lys	Xaa	Ser	Cys	Lys	Ala	Ser	Gly	Gly	Xaa	Xaa
	15				20					25					
Xaa	Xaa	Xaa	Gly	Ile	Ser	Trp	Val	Arg	Gln	Ala	Pro	Gly	Gln	Gly	Leu
30				35					40						45
Glu	Trp	Met	Gly	Asp	Ile	Ile	Pro	Ile	Tyr	Asp	Leu	Val	Asn	Tyr	Ala
				50				55						60	
Gln	Lys	Phe	Gln	Gly	Arg	Val	Thr	Ile	Thr	Ala	His	Lys	Ser	Thr	Thr
			65				70						75		
Thr	Ala	Tyr	Met	Glu	Val	Ile	Ser	Leu	Thr	Ser	Glu	Asp	Thr	Ala	Val
	80						85					90			
Tyr	Tyr	Cys	Ala	Arg	Glu	Ala	Arg	Glu	Trp	Gln	Trp	Leu	Val		
	95					100					105				

<210> 4139  
 <211> 387  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 9.4  
 seq FLFVVAAATGVQS/QX

<400> 4139  
 Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly  
                   -15                  -10                  -5  
 Val Gln Ser Gln Xaa Xaa Leu Val Gln Ser Gly Ala Glu Val Lys Lys  
                   1                  5                  10  
 Pro Gly Ser Ser Val Lys Xaa Ser Cys Lys Ala Ser Gly Gly Xaa Xaa  
           15                  20                  25  
 Xaa Xaa Xaa Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu  
 30                  35                  40                  45  
 Glu Trp Met Gly Asp Ile Ile Pro Ile Tyr Asp Leu Val Asn Tyr Ala  
                   50                  55                  60  
 Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala His Lys Ser Thr Thr  
           65                  70                  75  
 Thr Ala Tyr Met Glu Val Ile Ser Leu Thr Ser Glu Asp Thr Ala Val  
           80                  85                  90  
 Tyr Tyr Cys Ala Arg Asp Ser Ala Ser Val Val Met Ala Asn Gly Leu  
   95                  100                  105  
 Gly  
 110

<210> 4140  
 <211> 363  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 9.4  
 seq FLFVVAAATGVQS/QX

<400> 4140  
 Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly  
                   -15                  -10                  -5  
 Val Gln Ser Gln Xaa Xaa Leu Val Gln Ser Gly Ala Glu Val Lys Lys  
                   1                  5                  10  
 Pro Gly Ser Ser Val Lys Xaa Ser Cys Lys Ala Ser Gly Gly Xaa Xaa  
           15                  20                  25  
 Xaa Xaa Xaa Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu  
 30                  35                  40                  45

004220"666E1560



Glu Trp Met Gly Asp Ile Ile Pro Ile Tyr Asp Leu Val Asn Tyr Ala  
                           50                          55                          60  
 Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala His Lys Ser Thr Thr  
                           65                          70                          75  
 Thr Ala Tyr Met Glu Val Ile Ser Leu Thr Ser Glu Asp Thr Ala Val  
                           80                          85                          90  
 Tyr Tyr Cys Ala Arg Asp Ile Asn Arg  
                           95                          100

<210> 4141  
 <211> 426  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 9.4  
       seq FLFVVAAATGVQS/QX

<400> 4141  
 Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly  
                           -15                          -10                          -5  
 Val Gln Ser Gln Xaa Xaa Leu Val Gln Ser Gly Ala Glu Val Lys Lys  
                           1                          5                          10  
 Pro Gly Ser Ser Val Lys Xaa Ser Cys Lys Ala Ser Gly Gly Xaa Xaa  
                           15                          20                          25  
 Xaa Xaa Xaa Gly Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu  
 30                          35                          40                          45  
 Glu Trp Met Gly Asp Ile Ile Pro Ile Tyr Asp Leu Val Asn Tyr Ala  
                           50                          55                          60  
 Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala His Lys Ser Thr Thr  
                           65                          70                          75  
 Thr Ala Tyr Met Glu Val Ile Ser Leu Thr Ser Glu Asp Thr Ala Val  
                           80                          85                          90  
 Tyr Tyr Cys Ala Arg Gly Gln Ala Pro Gly Arg Val Val Val Pro Leu  
                           95                          100                          105  
 Phe Leu Trp Gly Gln Gly Thr Trp Ser Pro Ser Pro Gln Pro  
 110                          115                          120

<210> 4142  
 <211> 309  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 9.9  
       seq FLFVVAAATGVQS/QV

<400> 4142

Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly  
                           -15                          -10                          -5  
 Val Gln Ser Gln Val Gln Leu Val Gln Ser Gly Xaa Glu Val Lys Lys  
                           1                          5                          10  
 Pro Gly Ser Ser Val Arg Val Ser Cys Lys Ala Ser Gly Gly Xaa Xaa  
           15                          20                          25  
 Xaa Xaa Xaa Ala Val Xaa Trp Val Arg Gln Ala Pro Gly Gln Gly Leu  
 30                          35                          40                          45  
 Glu Trp Val Gly Arg Leu Ile Xaa Val Leu Asn Val Ala His Tyr Ala  
                           50                          55                          60  
 Gln Lys Xaa Gln Asp Arg Val Thr Ile Thr Ala Asp Lys Ser Thr Xaa  
                           65                          70                          75  
 Thr Ala Tyr Met Glu Leu Arg  
           80

<210> 4143  
 <211> 174  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 10.2  
       seq FLFVVAAAXGVQS/QV

<400> 4143  
 Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Xaa Gly  
                           -15                          -10                          -5  
 Val Gln Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys  
                           1                          5                          10  
 Pro Gly Ser Ser Val Lys Xaa Ser Cys Glu Ala Thr Gly Val Asp Val  
           15                          20                          25  
 Lys Lys Tyr Gly Phe Ser Trp Val Arg Gln  
 30                          35

<210> 4144  
 <211> 363  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 9.3  
       seq FLFVVAAATGVQX/QX

<400> 4144  
 Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly  
                           -15                          -10                          -5  
 Val Gln Xaa Gln Xaa Xaa Leu Val Gln Ser Xaa Ala Glu Xaa Lys Lys  
           1                          5                          10

Pro Xaa Ser Ser Val Ser Val Ser Cys Lys Thr Ser Gly Asp Thr Phe  
 15 20 25  
 Arg Arg Phe Thr Met Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu  
 30 35 40 45  
 Glu Trp Met Gly Arg Val Ile Pro Ile Leu Gly Ser Pro Thr Tyr Ala  
 50 55 60  
 Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Thr  
 65 70 75  
 Thr Val Tyr Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val  
 80 85 90  
 Tyr Tyr Cys Ala Arg Asp Ile Asn Arg  
 95 100

<210> 4145  
 <211> 426  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 9.3  
 seq FLFVVAAATGVQX/QX

<400> 4145  
 Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly  
 -15 -10 -5  
 Val Gln Xaa Gln Xaa Xaa Leu Val Gln Ser Xaa Ala Glu Xaa Lys Lys  
 1 5 10  
 Pro Xaa Ser Ser Val Ser Val Ser Cys Lys Thr Ser Gly Asp Thr Phe  
 15 20 25  
 Arg Arg Phe Thr Met Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu  
 30 35 40 45  
 Glu Trp Met Gly Arg Val Ile Pro Ile Leu Gly Ser Pro Thr Tyr Ala  
 50 55 60  
 Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Thr  
 65 70 75  
 Thr Val Tyr Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val  
 80 85 90  
 Tyr Tyr Cys Ala Arg Gly Gln Ala Pro Gly Arg Val Val Val Pro Leu  
 95 100 105  
 Phe Leu Trp Gly Gln Gly Thr Trp Ser Pro Ser Pro Gln Pro  
 110 115 120

<210> 4146  
 <211> 282  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 9.6

004220 666750

seq FLFVVAAATGVQS/QX

<400> 4146

```

Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly
              -15              -10              -5
Val Gln Ser Gln Xaa Gln Leu Xaa Gln Ser Gly Ala Glu Val Lys Lys
              1              5              10
Pro Gly Ser Ser Val Lys Val Ser Cys Glu Ala Ser Gly Tyr Thr Phe
      15              20              25
Ser Asn Tyr Ala Val Ser Trp Phe Gln Gly Arg Val Thr Ile Thr Ala
30              35              40              45
His Lys Ser Thr Thr Thr Ala Tyr Met Glu Val Ile Ser Leu Thr Ser
              50              55              60
Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Asp Ile Asn Arg
      65              70              75

```

<210> 4147

<211> 297

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -19...-1

<223> score 9.6

seq FLFVVAAATGVQS/QX

<400> 4147

```

Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly
              -15              -10              -5
Val Gln Ser Gln Xaa Gln Leu Xaa Gln Ser Gly Ala Glu Val Lys Lys
              1              5              10
Pro Gly Ser Ser Val Lys Val Ser Cys Glu Ala Ser Gly Tyr Thr Phe
      15              20              25
Ser Asn Tyr Ala Val Ser Trp Phe Gln Gly Arg Val Thr Ile Thr Ala
30              35              40              45
His Lys Ser Thr Thr Thr Ala Tyr Met Glu Val Ile Ser Leu Thr Ser
              50              55              60
Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Glu Ala Arg Glu Trp Gln
      65              70              75
Trp Leu Val
      80

```

<210> 4148

<211> 240

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -19...-1

<223> score 9.9

seq FLFVVAAATGVQS/QV

<400> 4148

```

Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly
                    -15                      -10                      -5
Val Gln Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
              1              5              10
Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Xaa Thr Phe
    15              20              25
Xaa Xaa Tyr Xaa Xaa Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
30              35              40              45
Xaa Trp Met Gly Arg Ile Xaa Pro Leu Asp Gly Ile Val Lys Tyr Ala
                    50              55              60

```

<210> 4149

<211> 291

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -19...-1

<223> score 9.4

seq FLFVVAAATGVQS/QX

<400> 4149

```

Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly
                    -15                      -10                      -5
Val Gln Ser Gln Xaa Gln Leu Xaa Gln Ser Gly Ala Glu Val Lys Lys
              1              5              10
Pro Gly Ser Ser Val Lys Val Ser Cys Lys Ala Ser Gly Gly Xaa Xaa
    15              20              25
Thr Xaa Met Leu Ser Xaa Gly Cys Asp Arg Pro Leu Asp Lys Asp Leu
30              35              40              45
Ser Gly Trp Glu Ala Thr Ser Leu Phe Leu Ile His Gln Ile Thr His
                    50              55              60
Arg Ser Ser Arg Thr Glu Ser Arg Phe Arg Trp Thr Asn Pro Leu Thr
            65              70              75
Gln

```

<210> 4150

<211> 378

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -19...-1

<223> score 9.3

seq FLFVVAAATGVQX/QX

&lt;400&gt; 4150

```

Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly
              -15                      -10                      -5
Val Gln Xaa Gln Xaa Xaa Leu Val Gln Ser Xaa Ala Glu Xaa Lys Lys
              1                      5                      10
Pro Xaa Ser Ser Val Ser Val Ser Cys Lys Thr Ser Gly Asp Thr Phe
    15                      20                      25
Arg Arg Phe Thr Met Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
30                      35                      40                      45
Glu Trp Met Gly Arg Val Ile Pro Ile Leu Gly Ser Pro Thr Tyr Ala
              50                      55                      60
Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Thr
              65                      70                      75
Thr Val Tyr Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val
    80                      85                      90
Tyr Tyr Cys Ala Arg Glu Ala Arg Glu Trp Gln Trp Leu Val
    95                      100                      105

```

&lt;210&gt; 4151

&lt;211&gt; 387

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SIGNAL

&lt;222&gt; -19...-1

&lt;223&gt; score 9.3

seq FLFVVAATGVQX/QX

&lt;400&gt; 4151

```

Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly
              -15                      -10                      -5
Val Gln Xaa Gln Xaa Xaa Leu Val Gln Ser Xaa Ala Glu Xaa Lys Lys
              1                      5                      10
Pro Xaa Ser Ser Val Ser Val Ser Cys Lys Thr Ser Gly Asp Thr Phe
    15                      20                      25
Arg Arg Phe Thr Met Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
30                      35                      40                      45
Glu Trp Met Gly Arg Val Ile Pro Ile Leu Gly Ser Pro Thr Tyr Ala
              50                      55                      60
Gln Lys Phe Gln Gly Arg Val Thr Ile Thr Ala Asp Glu Ser Thr Thr
              65                      70                      75
Thr Val Tyr Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val
    80                      85                      90
Tyr Tyr Cys Ala Arg Asp Ser Ala Ser Val Val Met Ala Asn Gly Leu
    95                      100                      105
Gly
110

```

&lt;210&gt; 4152

&lt;211&gt; 306

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 9.6  
 seq FLFVVAATGVQS/QX

<400> 4152  
 Met Asp Trp Thr Trp Arg Phe Leu Phe Val Val Ala Ala Ala Thr Gly  
                   -15                  -10                  -5  
 Val Gln Ser Gln Xaa Gln Leu Xaa Gln Ser Gly Ala Glu Val Lys Lys  
                   1                  5                  10  
 Pro Gly Ser Ser Val Lys Val Ser Cys Glu Ala Ser Gly Tyr Thr Phe  
       15                  20                  25  
 Ser Asn Tyr Ala Val Ser Trp Phe Gln Gly Arg Val Thr Ile Thr Ala  
 30                  35                  40                  45  
 His Lys Ser Thr Thr Thr Ala Tyr Met Glu Val Ile Ser Leu Thr Ser  
                   50                  55                  60  
 Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg Asp Ser Ala Ser Val Val  
                   65                  70                  75  
 Met Ala Asn Gly Leu Gly  
           80

<210> 4153  
 <211> 402  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -22...-1  
 <223> score 15.3  
 seq LLLLLTHLPLALG/SP

<400> 4153  
 Met Gly Pro Thr Ser Gly Pro Ser Leu Leu Leu Leu Leu Leu Thr His  
           -20                  -15                  -10  
 Leu Pro Leu Ala Leu Gly Ser Pro Met Tyr Ser Ile Ile Thr Pro Asn  
       -5                  1                  5                  10  
 Ile Leu Arg Leu Glu Ser Glu Glu Thr Met Val Leu Glu Ala His Asp  
                   15                  20                  25  
 Ala Gln Gly Asp Val Pro Val Thr Val Thr Val His Asp Phe Pro Gly  
           30                  35                  40  
 Lys Lys Leu Val Leu Ser Ser Glu Lys Thr Val Leu Thr Pro Ala Thr  
       45                  50                  55  
 Asn His Met Gly Asn Val Thr Phe Thr Ile Pro Ala Asn Arg Glu Phe  
       60                  65                  70  
 Lys Ser Glu Lys Gly Xaa Asn Lys Phe Val Thr Val Gln Ala Thr Phe  
 75                  80                  85                  90  
 Gly Thr Gln Val Val Glu Lys Val Val Leu Val Ser Leu Gln Ser Gly  
                   95                  100                  105  
 Xaa Leu Phe Ile Gln Thr

004220" 0066E550

**SECRET**

```
<220>
<221> SIGNAL
<222> -24..-1
<223> score 5.4
      seq VYLTIFLLSSLS/SY
```

```
<210> 4155
<211> 240
<212> PRT
<213> Homo sapiens
```

<400> 4155															
Met	Arg	Val	Gly	Phe	Pro	Phe	Gln	Glu	Glu	Ser	Ser	Ala	Asp	Lys	Leu
	-40					-35					-30				
Asp	Cys	Pro	Leu	Gln	Lys	Glu	Ala	His	Arg	Ala	Leu	Gly	Leu	Pro	Phe
-25					-20					-15					-10
Leu	Pro	Leu	Leu	Ser	Thr	Thr	Leu	Cys	Pro	Phe	Gly	Ser	Pro	Gly	Leu
				-5					1				5		
Trp	Arg	Pro	Gln	Leu	Ser	Cys	Thr	Arg	Val	Pro	Cys	Met	Leu	Trp	Ala
		10					15					20			
Leu	Ser	Ala	Asn	Gln	Arg	Val	Ala	Ser	Leu	Gln	Ser	Gln	Pro	Phe	Pro
	25					30					35				

**<220>**



<221> SIGNAL  
 <222> -16...-1  
 <223> score 10.1  
 seq LWTLSSLLLGAVAG/KE

<400> 4156

Met	Leu	Pro	Leu	Trp	Thr	Leu	Ser	Leu	Leu	Leu	Gly	Ala	Val	Ala	Gly
-15					-10						-5				
Lys	Glu	Val	Cys	Tyr	Glu	Arg	Leu	Gly	Cys	Phe	Ser	Asp	Asp	Ser	Pro
1			5					10						15	
Trp	Ser	Gly	Ile	Thr	Glu	Arg	Pro	Leu	His	Ile	Leu	Pro	Trp	Ser	Pro
		20						25					30		
Lys	Asp	Val	Asn	Thr	Arg	Phe	Leu	Leu	Tyr	Thr	Asn	Glu	Asn	Pro	Asn
	35						40				45				
Asn	Phe	Gln	Glu	Val	Ala	Ala	Asp	Ser	Ser	Ser	Ile	Ser	Gly	Ser	Asn
	50					55					60				
Phe	Lys	Thr	Asn	Arg	Lys	Thr	Arg	Phe	Ile	Ile	Arg	Phe	Ile	Asp	Lys
65					70					75					80
Gly	Glu	Glu	Asn	Trp	Leu	Ala	Asn	Val	Cys	Lys	Asn	Leu	Phe	Lys	Val
			85						90					95	
Glu	Ser	Val	Asn	Cys	Ile	Cys	Val	Asp	Trp	Lys	Gly	Gly	Ser	Arg	Thr
		100						105					110		
Gly	Tyr	Thr	Gln	Ala	Ser	Gln	Asn	Ile	Arg	Ile	Val	Gly	Ala	Glu	Val
		115					120						125		
Ala	Tyr	Phe	Val	Glu	Phe	Leu	Gln	Ser	Ala	Phe	Gly	Tyr	Ser	Pro	Ser
	130					135					140				
Asn	Val	His	Val	Ile	Gly	His	Ser	Leu	Gly	Ala	His	Ala	Ala	Gly	Glu
145					150					155					160
Ala	Gly	Arg	Arg	Thr	Asn	Gly	Thr	Ile	Gly	Arg	Ile	Thr	Gly	Leu	Asp
			165						170					175	
Pro	Ala	Glu	Pro	Cys	Phe	Gln	Gly	Thr	Pro	Glu	Leu	Val	Arg	Leu	Asp
		180						185					190		
Pro	Ser	Asp	Ala	Lys	Phe	Val	Asp	Val	Ile	His	Thr	Asp	Gly	Ala	Pro
		195					200					205			
Ile	Val	Pro	Asn	Leu	Gly	Phe	Gly	Met	Ser	Gln	Val	Val	Gly	His	Leu
	210					215					220				
Asp	Phe	Phe	Pro	Asn	Gly	Gly	Val	Glu	Met	Pro	Gly	Cys	Lys	Lys	Asn
225				230						235					240
Ile	Leu	Ser	Gln	Ile	Val	Asp	Ile	Asp	Gly	Ile	Trp	Glu	Gly	Thr	Arg
			245						250					255	
Asp	Phe	Ala	Ala	Cys	Asn	His	Leu	Arg	Ser	Tyr	Lys	Tyr	Tyr	Thr	Asp
		260						265					270		
Ser	Ile	Val	Asn	Pro	Asp	Gly	Phe	Ala	Gly	Phe	Pro	Cys	Ala	Ser	Tyr
		275					280					285			
Asn	Val	Phe	Thr	Ala	Asn	Lys	Cys	Phe	Pro	Cys	Pro	Ser	Gly	Gly	Cys
	290					295					300				
Xaa	Gln	Met	Gly	His	Tyr	Ala	Asp	Arg	Tyr	Pro	Gly	Lys	Thr	Asn	Asp
305					310					315					320
Val	Gly	Gln	Lys	Phe	Tyr	Leu	Asp	Thr	Gly	Asp	Ala	Ser	Asn	Phe	Ala
			325						330					335	
Arg	Trp	Arg	Tyr	Lys	Val	Ser	Val	Thr	Leu	Ser	Gly	Lys	Lys	Val	Thr
		340						345					350		
Gly	His	Ile	Leu	Val	Ser	Leu	Phe	Gly	Asn	Lys	Gly	Asn	Ser	Lys	Gln

004220" 655EFS60

355 360 365  
 Tyr Glu Ile Phe Lys Gly Asn Xaa  
 370 375

<210> 4157  
 <211> 534  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -18..-1  
 <223> score 11.4  
 seq WTLGLLLLATVRG/KE

<400> 4157  
 Met Met Leu Pro Pro Trp Thr Leu Gly Leu Leu Leu Leu Ala Thr Val  
 -15 -10 -5  
 Arg Gly Lys Glu Val Cys Tyr Gly Gln Leu Gly Cys Phe Ser Asp Glu  
 1 5 10  
 Lys Pro Trp Ala Gly Thr Leu Gln Arg Pro Val Lys Leu Leu Pro Trp  
 15 20 25 30  
 Ser Pro Glu Asp Ile Asp Thr Arg Phe Leu Leu Tyr Thr Asn Glu Asn  
 35 40 45  
 Pro Asn Asn Phe Gln Leu Ile Thr Gly Thr Glu Pro Asp Thr Ile Glu  
 50 55 60  
 Ala Ser Asn Phe Gln Leu Asp Arg Lys Thr Arg Phe Ile Ile His Gly  
 65 70 75  
 Phe Leu Asp Lys Ala Glu Asp Ser Trp Pro Ser Asp Met Cys Lys Lys  
 80 85 90  
 Met Phe Glu Val Glu Lys Val Asn Cys Ile Cys Val Asp Trp Arg His  
 95 100 105 110  
 Gly Ser Xaa Ala Met Tyr Thr Gln Ala Val Gln Asn Ile Arg Val Val  
 115 120 125  
 Gly Ala Glu Thr Ala Phe Leu Ile Gln Ala Leu Ser Thr Gln Leu Gly  
 130 135 140  
 Tyr Ser Leu Glu Xaa Val His Val Ile Gly His Ser Leu Gly Ala His  
 145 150 155  
 Thr Xaa  
 160

<210> 4158  
 <211> 363  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -18..-1  
 <223> score 11.4  
 seq WTLGLLLLATVRG/KE

&lt;400&gt; 4158

```

Met Met Leu Pro Pro Trp Thr Leu Gly Leu Leu Leu Leu Ala Thr Val
      -15                      -10                      -5
Arg Gly Lys Glu Val Cys Tyr Gly Gln Leu Gly Cys Phe Ser Asp Glu
      1                      5                      10
Lys Pro Trp Ala Gly Thr Leu Gln Arg Pro Val Lys Leu Leu Pro Trp
15                      20                      25                      30
Ser Pro Glu Asp Ile Asp Thr Arg Phe Leu Leu Tyr Thr Asn Glu Asn
      35                      40                      45
Pro Asn Asn Phe Gln Asp Glu Pro Glu Glu Val Arg Leu Asp Pro Ser
      50                      55                      60
Asp Ala Val Phe Val Asp Val Ile His Thr Asp Ser Ser Pro Ile Val
      65                      70                      75
Pro Ser Leu Gly Phe Gly Met Ser Gln Lys Val Gly His Leu Asp Phe
      80                      85                      90
Phe Pro Asn Gly Gly Lys Glu Met Pro
95                      100

```

&lt;210&gt; 4159

&lt;211&gt; 336

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SIGNAL

&lt;222&gt; -26..-1

&lt;223&gt; score 4.8

seq LIVLLGQFVSIKA/QE

&lt;400&gt; 4159

```

Met Met Ala Asn Trp Ala Glu Ala Arg Pro Leu Leu Ile Leu Ile Val
      -25                      -20                      -15
Leu Leu Gly Gln Phe Val Ser Ile Lys Ala Gln Glu Glu Asp Glu Asp
-10                      -5                      1                      5
Glu Gly Tyr Gly Glu Glu Ile Ala Cys Thr Gln Asn Gly Gln Met Tyr
      10                      15                      20
Leu Asn Arg Asp Ile Trp Lys Pro Ala Pro Cys Gln Ile Cys Val Cys
      25                      30                      35
Asp Asn Gly Ala Ile Leu Cys Asp Lys Ile Glu Cys Gln Asp Val Leu
      40                      45                      50
Asp Cys Ala Asp Pro Val Thr Pro Pro Gly Glu Cys Cys Pro Val Cys
55                      60                      65                      70
Ser Gln Thr Pro Gly Gly Gly Asn Thr Asn Phe Gly Arg Gly Arg Lys
      75                      80                      85

```

&lt;210&gt; 4160

&lt;211&gt; 273

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SIGNAL

&lt;222&gt; -19..-1

<223> score 7.2  
seq LIWTLFFLGTAVS/LQ

<400> 4160  
Met Leu Gln Thr Lys Asp Leu Ile Trp Thr Leu Phe Phe Leu Gly Thr  
-15 -10 -5  
Ala Val Ser Leu Gln Val Asp Ile Val Pro Ser Gln Gly Glu Ile Ser  
1 5 10  
Val Gly Glu Ser Lys Phe Phe Leu Cys Gln Val Ala Gly Asp Ala Lys  
15 20 25  
Asp Lys Asp Ile Ser Trp Phe Ser Pro Asn Gly Glu Lys Leu Thr Pro  
30 35 40 45  
Asn Gln Gln Arg Ile Ser Val Val Trp Asn Asp Asp Ser Ser Ser Thr  
50 55 60  
Leu Thr Ile Tyr Asn Ala Asn Ile Asp Asp Ala  
65 70

<210> 4161  
<211> 420  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -15...-1  
<223> score 4.9  
seq ELVALLLLTLAYL/FW

<400> 4161  
Met Trp Glu Leu Val Ala Leu Leu Leu Leu Thr Leu Ala Tyr Leu Phe  
-15 -10 -5 1  
Trp Pro Lys Arg Arg Cys Pro Gly Ala Lys Tyr Pro Lys Ser Leu Leu  
5 10 15  
Ser Leu Pro Leu Val Gly Ser Leu Pro Phe Leu Pro Arg His Gly His  
20 25 30  
Met His Asn Asn Phe Phe Lys Leu Gln Lys Lys Tyr Gly Pro Ile Tyr  
35 40 45  
Ser Val Arg Met Gly Thr Lys Thr Thr Val Ile Val Gly His His Gln  
50 55 60 65  
Leu Ala Lys Glu Val Leu Ile Lys Lys Gly Lys Asp Phe Ser Gly Arg  
70 75 80  
Pro Gln Met Ala Thr Leu Asp Ile Ala Ser Asn Asn Arg Lys Gly Ile  
85 90 95  
Ala Phe Ala Asp Ser Gly Ala Xaa Trp Gln Leu His Arg Arg Leu Ala  
100 105 110  
Met Ala Thr Phe Ala Cys Ser Arg Met Ala Ile Arg  
115 120 125

<210> 4162  
<211> 300  
<212> PRT  
<213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -16...-1  
 <223> score 8.5  
 seq AVLFSGALLGLLA/AQ

<400> 4162  
 Met Arg Leu Ala Val Leu Phe Ser Gly Ala Leu Leu Gly Leu Leu Ala  
 -15 -10 -5  
 Ala Gln Gly Thr Gly Asn Asp Cys Pro His Lys Lys Ser Ala Thr Leu  
 1 5 10 15  
 Leu Pro Ser Phe Thr Val Thr Pro Thr Val Thr Glu Ser Thr Gly Thr  
 20 25 30  
 Thr Ser His Arg Thr Thr Lys Ser His Lys Thr Thr Thr His Arg Thr  
 35 40 45  
 Thr Thr Thr Gly Thr Thr Ser His Gly Pro Thr Thr Ala Thr His Asn  
 50 55 60  
 Pro Thr Thr Thr Ser His Gly Asn Val Thr Val His Pro Thr Ser Asn  
 65 70 75 80  
 Ser Thr Ala Thr

<210> 4163  
 <211> 405  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -17...-1  
 <223> score 13  
 seq VLCVCLLPGLA/LP

<400> 4163  
 Met Arg Leu Thr Val Leu Cys Ala Val Cys Leu Leu Pro Gly Ser Leu  
 -15 -10 -5  
 Ala Leu Pro Leu Pro Gln Glu Ala Gly Gly Met Ser Glu Leu Gln Trp  
 1 5 10 15  
 Glu Gln Ala Gln Asp Tyr Leu Lys Arg Phe Tyr Leu Tyr Asp Ser Glu  
 20 25 30  
 Thr Lys Asn Ala Asn Ser Leu Glu Ala Lys Leu Lys Glu Met Gln Lys  
 35 40 45  
 Phe Phe Gly Leu Pro Ile Thr Gly Met Leu Asn Ser Xaa Val Ile Glu  
 50 55 60  
 Ile Met Gln Lys Pro Arg Cys Gly Val Pro Asp Val Ala Glu Tyr Ser  
 65 70 75  
 Leu Phe Pro Asn Ser Pro Lys Trp Thr Ser Lys Val Val Thr Tyr Arg  
 80 85 90 95  
 Ile Val Ser Tyr Thr Arg Asp Leu Pro His Ile Thr Val Asp Arg Leu  
 100 105 110  
 Val Ser Lys Ala Leu Asn Met  
 115

<210> 4164  
 <211> 363  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -35..-1  
 <223> score 4.1  
 seq ILSKMMLMSTATA/FY

<400> 4164  
 Met Val Asp Leu Thr Gln Val Met Asp Asp Glu Val Phe Met Ala Phe  
 -35 -30 -25 -20  
 Ala Ser Tyr Ala Thr Ile Ile Leu Ser Lys Met Met Leu Met Ser Thr  
 -15 -10 -5  
 Ala Thr Ala Phe Tyr Arg Leu Thr Arg Lys Val Phe Ala Asn Pro Glu  
 1 5 10  
 Asp Cys Val Ala Phe Gly Lys Gly Glu Asn Ala Lys Lys Tyr Leu Arg  
 15 20 25  
 Thr Asp Asp Arg Val Glu Arg Val Arg Arg Ala His Leu Asn Asp Leu  
 30 35 40 45  
 Glu Asn Ile Ile Pro Phe Leu Gly Ile Gly Leu Leu Tyr Ser Leu Ser  
 50 55 60  
 Gly Pro Asp Pro Ser Thr Ala Ile Leu His Phe Arg Leu Phe Val Gly  
 65 70 75  
 Ala Arg Ile Tyr His Thr Ile Ala Tyr  
 80 85

<210> 4165  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -25..-1  
 <223> score 6.3  
 seq AFSLSVMAALTFG/CF

<400> 4165  
 Met Asn Thr Val Leu Ser Arg Ala Asn Ser Leu Phe Ala Phe Ser Leu  
 -25 -20 -15 -10  
 Ser Val Met Ala Ala Leu Thr Phe Gly Cys Phe Ile Thr Thr Ala Phe  
 -5 1 5  
 Lys Asp Arg Ser Val Pro Val Arg Leu His Val Ser Arg Ile Met Leu  
 10 15 20  
 Lys Asn Val Glu Asp Phe Thr  
 25 30

<210> 4166

<211> 240  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -16...-1  
 <223> score 11.5  
 seq TIILLLLLAQVSWA/GP

<400> 4166  
 Met Lys Ala Thr Ile Ile Leu Leu Leu Leu Ala Gln Val Ser Trp Ala  
       -15                      -10                      -5  
 Gly Pro Phe Gln Gln Arg Gly Leu Phe Asp Phe Met Leu Glu Asp Glu  
 1                      5                      10                      15  
 Ala Ser Gly Ile Gly Pro Glu Val Pro Asp Asp Arg Asp Phe Glu Pro  
                       20                      25                      30  
 Ser Leu Gly Pro Val Cys Pro Phe Arg Cys Gln Cys His Leu Arg Val  
           35                      40                      45  
 Val Gln Cys Ser Asp Leu Gly Leu Asp Lys Val Pro Lys Asp Leu Pro  
       50                      55                      60

<210> 4167  
 <211> 270  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -16...-1  
 <223> score 11.5  
 seq TIILLLLLAQVSWA/GP

<400> 4167  
 Met Lys Ala Thr Ile Ile Leu Leu Leu Leu Ala Gln Val Ser Trp Ala  
       -15                      -10                      -5  
 Gly Pro Phe Gln Gln Arg Gly Leu Phe Asp Phe Met Leu Glu Asp Glu  
 1                      5                      10                      15  
 Ala Ser Gly Ile Gly Pro Glu Val Pro Asp Asp Arg Asp Phe Glu Pro  
                       20                      25                      30  
 Ser Leu Gly Pro Val Cys Pro Phe Arg Cys Gln Cys His Leu Arg Val  
           35                      40                      45  
 Val Gln Cys Ser Asp Leu Gly Leu Asp Lys Val Pro Lys Asp Leu Pro  
       50                      55                      60  
 Pro Asp Thr Thr Leu Leu Asp Leu Gln Asn  
 65                      70

<210> 4168  
 <211> 615  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -25...-1  
 <223> score 10.1  
 seq LLYVLLLAFCACA/VG

<400> 4168  
 Met Ala Val Glu Gly Gly Met Lys Cys Val Lys Phe Leu Leu Tyr Val  
 -25 -20 -15 -10  
 Leu Leu Leu Ala Phe Cys Ala Cys Ala Val Gly Leu Ile Ala Val Gly  
 -5 1 5  
 Val Gly Ala Gln Leu Val Leu Ser Gln Thr Ile Ile Gln Gly Ala Thr  
 10 15 20  
 Pro Gly Ser Leu Leu Pro Val Val Ile Ile Ala Val Gly Val Phe Leu  
 25 30 35  
 Phe Leu Val Ala Phe Val Gly Cys Cys Gly Ala Cys Lys Glu Asn Tyr  
 40 45 50 55  
 Cys Leu Met Ile Thr Phe Ala Ile Phe Leu Ser Leu Ile Met Leu Val  
 60 65 70  
 Glu Val Ala Ala Ile Ala Gly Tyr Val Phe Arg Asp Lys Val Met  
 75 80 85  
 Ser Glu Phe Asn Asn Asn Phe Arg Gln Gln Met Glu Asn Tyr Pro Lys  
 90 95 100  
 Asn Asn His Thr Ala Ser Ile Leu Asp Arg Met Gln Ala Asp Phe Lys  
 105 110 115  
 Cys Cys Gly Ala Ala Asn Tyr Thr Asp Trp Glu Lys Ile Pro Ser Met  
 120 125 130 135  
 Ser Lys Asn Arg Val Pro Asp Ser Cys Cys Ile Asn Val Thr Val Gly  
 140 145 150  
 Cys Gly Ile Asn Phe Asn Glu Lys Ala Ile His Lys Glu Gly Cys Val  
 155 160 165  
 Glu Lys Ile Gly Gly Trp Leu Arg Lys Asn Val Leu Val  
 170 175 180

<210> 4169  
 <211> 273  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -25...-1  
 <223> score 10.1  
 seq LLYVLLLAFCACA/VG

<400> 4169  
 Met Ala Val Glu Gly Gly Met Lys Cys Val Lys Phe Leu Leu Tyr Val  
 -25 -20 -15 -10  
 Leu Leu Leu Ala Phe Cys Ala Cys Ala Val Gly Leu Ile Ala Val Gly  
 -5 1 5  
 Val Gly Ala Gln Leu Val Leu Ser Gln Thr Ile Ile Gln Gly Ala Thr  
 10 15 20



Pro Gly Ser Leu Leu Pro Val Val Ile Ile Ala Val Gly Val Phe Leu  
 25 30 35  
 Phe Leu Val Ala Phe Val Gly Cys Cys Gly Pro Phe Gln Thr Ala Lys  
 40 45 50 55  
 Ser Leu Thr Ser Ile Leu Thr Leu Cys Gln Ala  
 60 65

<210> 4170  
 <211> 174  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -32...-1  
 <223> score 4.7  
 seq RVLXLCNSRVST/RX

<400> 4170  
 Met Ser Cys Thr His Ser Ser Ser Asn Leu Gly Lys Phe Ser Val His  
 -30 -25 -20  
 Arg Glu Tyr Arg Val Leu Xaa Leu Cys Asn Ser Arg Val Ser Phe Thr  
 -15 -10 -5  
 Arg Xaa His Val Lys Arg Pro Pro Xaa Arg Leu Cys Val Ser Ser Lys  
 1 5 10 15  
 Gly Cys Leu Phe His Leu Gly Ala Gly Arg  
 20 25

<210> 4171  
 <211> 498  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -33...-1  
 <223> score 9.9  
 seq SVFFLLLPGPSAA/DE

<400> 4171  
 Met Leu Arg Leu Ser Glu Arg Asn Met Lys Val Leu Leu Ala Ala Ala  
 -30 -25 -20  
 Leu Ile Ala Gly Ser Val Phe Phe Leu Leu Leu Pro Gly Pro Ser Ala  
 -15 -10 -5  
 Ala Asp Glu Lys Lys Lys Gly Pro Lys Val Thr Val Lys Val Tyr Phe  
 1 5 10 15  
 Asp Leu Arg Ile Gly Asp Glu Asp Val Gly Arg Val Ile Phe Gly Leu  
 20 25 30  
 Phe Gly Lys Thr Val Pro Lys Thr Val Asp Asn Phe Val Ala Leu Ala  
 35 40 45  
 Thr Gly Glu Lys Gly Phe Gly Tyr Lys Asn Ser Lys Phe His Arg Val  
 50 55 60

Ile Lys Asp Phe Met Ile Gln Gly Gly Asp Phe Thr Arg Gly Asp Gly  
65 70 75  
Thr Gly Gly Lys Ser Ile Tyr Gly Glu Arg Phe Pro Asp Glu Asn Phe  
80 85 90 95  
Lys Leu Lys His Tyr Gly Pro Gly Trp Val Ser Met Ala Asn Ala Gly  
100 105 110  
Lys Arg His Pro Xaa Gly Ser Pro Ser Ser Ser Arg Gln Xaa Lys  
115 120 125  
Thr Ala Trp Leu Asp Gly  
130

<210> 4172  
<211> 396  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -31..-1  
<223> score 9.1  
seq LLLLTMALAGGSG/TA

<400> 4172  
Met Ala Ala Pro Lys Gly Ser Leu Trp Val Arg Thr Gln Leu Gly Leu  
-30 -25 -20  
Pro Pro Leu Leu Leu Leu Thr Met Ala Leu Ala Gly Gly Ser Gly Thr  
-15 -10 -5 1  
Ala Ser Ala Glu Ala Phe Asp Ser Val Leu Gly Asp Thr Ala Ser Cys  
5 10 15  
His Arg Ala Cys Gln Leu Thr Tyr Pro Leu His Thr Tyr Pro Lys Glu  
20 25 30  
Glu Glu Leu Tyr Ala Cys Gln Arg Gly Cys Arg Leu Phe Ser Ile Cys  
35 40 45  
Gln Phe Val Asp Asp Gly Ile Asp Leu Asn Arg Thr Lys Leu Glu Cys  
50 55 60 65  
Glu Ser Ala Cys Thr Glu Ala Tyr Ser Gln Ser Asp Glu Gln Tyr Ala  
70 75 80  
Cys His Leu Gly Cys Gln Asn Gln Leu Pro Phe Ala Glu Leu Arg Gln  
85 90 95  
Glu Gln Leu Met  
100

<210> 4173  
<211> 333  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -17..-1  
<223> score 6.4  
seq AILAAILPGXAPA/GP

&lt;400&gt; 4173

```

Met Arg Thr Leu Ala Ile Leu Ala Ala Ile Leu Pro Gly Xaa Ala Pro
      -15                -10                -5
Ala Gly Pro Arg Leu Ser His Ser Xaa Gln Glu Leu Ile Glu Val Ala
  1          5          10          15
Ala Ala Pro Glu Gln Ile Ala Ala Asp Ile Pro Glu Val Val Cys Phe
      20          25          30
Pro Cys Met Gly Arg Lys Leu Gly Ser Lys Ala Ser Arg Leu Lys Glu
      35          40          45
Lys His Gly Leu Leu Leu Gln Asn Thr Ser Val His Cys Arg Arg Thr
      50          55          60
Ser Leu Trp Asn Leu His Leu Pro Gly Lys Thr Leu Gly Ile Leu Leu
      65          70          75
Leu Ser Leu Gln Lys Lys Lys Asn Xaa Leu Lys Ile Cys Phe Xaa
80          85          90

```

&lt;210&gt; 4174

&lt;211&gt; 294

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SIGNAL

&lt;222&gt; -21...-1

&lt;223&gt; score 7.9

seq MMLLLGLLAYGSG/XD

&lt;400&gt; 4174

```

Met Ser Val Pro Thr Met Ala Trp Met Met Leu Leu Leu Gly Leu Leu
      -20                -15                -10
Ala Tyr Gly Ser Gly Xaa Asp Ser Gln Thr Val Val Thr Gln Glu Pro
      -5          1          5          10
Ser Phe Ser Val Ser Pro Gly Xaa Thr Val Thr Leu Thr Cys Gly Leu
      15          20          25
Xaa Ser Gly Ser Val Ser Thr Xaa Xaa Xaa Pro Ser Trp Tyr Gln Gln
      30          35          40
Thr Pro Gly Gln Xaa Pro Arg Thr Leu Ile Tyr Asn Thr Asn Thr Arg
      45          50          55
Ser Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Ile Leu Gly Asn Lys
60          65          70          75
Ala Ala

```

&lt;210&gt; 4175

&lt;211&gt; 354

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SIGNAL

&lt;222&gt; -20...-1

&lt;223&gt; score 7.8

seq LTLTLCIGSVVS/SE

0044220"666ET560

<400> 4175

```

Met Ala Trp Thr Pro Leu Trp Leu Thr Leu Leu Thr Leu Cys Ile Gly
-20          -15          -10          -5
Ser Val Val Ser Ser Glu Leu Thr Xaa Asp Pro Ala Val Ser Val Ala
          1          5          10
Leu Gly Gln Thr Val Arg Ile Thr Cys Gln Gly Asp Xaa Leu Xaa Xaa
          15          20          25
Tyr Xaa Ala Ser Trp Xaa Gln Lys Pro Gly Gln Ala Pro Xaa Leu
          30          35          40
Val Xaa Tyr Xaa Xaa Xaa Xaa Arg Pro Xaa Gly Ile Pro Asp Arg Phe
45          50          55          60
Ser Gly Ser Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala
          65          70          75
Gln Ala Glu Asp Glu Ala Asp Tyr Xaa Cys Asn Ser Arg Asp Ser Ser
          80          85          90
Gly His His Leu Val Phe
          95

```

<210> 4176

<211> 180

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -17...-1

<223> score 5.8

seq LWLKLLAFGFAFL/DT

<400> 4176

```

Met Thr Met Tyr Leu Trp Leu Lys Leu Leu Ala Phe Gly Phe Ala Phe
          -15          -10          -5
Leu Asp Thr Glu Val Phe Val Thr Gly Gln Ser Pro Thr Pro Ser Pro
          1          5          10          15
Thr Asp Xaa Tyr Leu Asn Ala Ser Glu Thr Thr Thr Leu Ser Pro Ser
          20          25          30
Gly Ser Ala Val Ile Ser Thr Thr Thr Ile Ala Thr
          35          40

```

<210> 4177

<211> 387

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -26...-1

<223> score 14.3

seq PLLLLLLLRAVLA/VP

<400> 4177  
 Met Pro Pro Ser Gly Pro Arg Gly Thr Leu Leu Leu Leu Pro Leu Leu  
 -25 -20 -15  
 Leu Leu Leu Leu Leu Arg Ala Val Leu Ala Val Pro Leu Glu Arg Gly  
 -10 -5 1 5  
 Ala Pro Asn Lys Glu Glu Thr Pro Ala Thr Glu Ser Pro Asp Thr Gly  
 10 15 20  
 Leu Tyr Tyr His Arg Tyr Leu Gln Glu Val Ile Asp Val Leu Glu Thr  
 25 30 35  
 Asp Gly His Phe Arg Glu Lys Leu Gln Ala Ala Asn Ala Glu Asp Ile  
 40 45 50  
 Lys Ser Gly Lys Leu Ser Arg Glu Leu Asp Phe Val Ser His His Val  
 55 60 65 70  
 Arg Thr Lys Leu Asp Glu Leu Lys Arg Gln Glu Val Ser Arg Leu Arg  
 75 80 85  
 Met Leu Leu Lys Ala Lys Met Thr Pro Ser Arg Ile Gln Cys Thr Gly  
 90 95 100  
 Gly

<210> 4178  
 <211> 384  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -24...-1  
 <223> score 4.2  
 seq IWSFPLIIAAVCA/QS

<400> 4178  
 Met Trp Arg Val Arg Lys Xaa Gly Tyr Phe Gly Ile Trp Ser Phe Pro  
 -20 -15 -10  
 Leu Ile Ile Ala Val Cys Ala Gln Ser Val Asn Asp Pro Ser Asn  
 -5 1 5  
 Met Ser Leu Val Lys Glu Thr Val Asp Arg Leu Leu Lys Gly Tyr Asp  
 10 15 20  
 Ile Arg Leu Arg Pro Asp Phe Gly Gly Pro Pro Val Ala Val Gly Met  
 25 30 35 40  
 Asn Ile Asp Ile Ala Ser Ile Asp Met Val Ser Glu Val Asn Met Asp  
 45 50 55  
 Tyr Thr Leu Thr Met Tyr Phe Gln Gln Ala Trp Arg Asp Lys Arg Leu  
 60 65 70  
 Ser Xaa Asn Val Ile Pro Leu Asn Leu Thr Leu Asp Asn Arg Val Ala  
 75 80 85  
 Asp Gln Leu Trp Val Pro Asp Thr Tyr Phe Leu Asn Asp Lys Lys Ser  
 90 95 100

<210> 4179  
 <211> 174  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -14...-1  
 <223> score 8.6  
 seq LLAFSQALLVVFS/ER

<400> 4179  
 Met Leu Leu Ala Phe Ser Gln Ala Leu Leu Val Val Phe Ser Glu Arg  
                   -10                  -5                  1  
 Arg Leu Leu Pro Ser Gly Leu Ser Trp Leu Met Gly Ser Cys Ser Cys  
       5                  10                  15  
 Leu Cys Thr His Pro Leu Leu Ser Cys Gln Leu Cys Pro Cys Leu Arg  
      20                  25                  30  
 Trp Ser Tyr Leu Ser Arg Xaa Pro Ser Cys  
 35                  40

<210> 4180  
 <211> 231  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -32...-1  
 <223> score 3.7  
 seq EALILQLFSQIGP/CK

<400> 4180  
 Met Glu Asp Glu Met Pro Lys Thr Leu Tyr Val Gly Asn Leu Ser Arg  
           -30                  -25                  -20  
 Asp Val Thr Glu Ala Leu Ile Leu Gln Leu Phe Ser Gln Ile Gly Pro  
      -15                  -10                  -5  
 Cys Lys Asn Cys Lys Met Ile Met Asp Thr Ala Gly Asn Asp Pro Tyr  
 1                  5                  10                  15  
 Cys Phe Val Glu Phe His Glu His Arg His Ala Ala Ala Ala Leu Ala  
      20                  25                  30  
 Ala Met Asn Gly Arg Lys Ile Met Gly Lys Glu Val Lys  
      35                  40                  45

<210> 4181  
 <211> 219  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -37...-1  
 <223> score 4.8  
 seq GIGLLAAATQSLs/MP

<400> 4181

004220"666ET560

Met Ser Lys Ser Phe Gln Gln Ser Ser Leu Ser Arg Asp Ser Gln Gly  
           -35                          -30                          -25  
 His Gly Arg Asp Leu Ser Xaa Ala Gly Ile Gly Leu Leu Ala Ala Ala  
       -20                          -15                          -10  
 Thr Gln Ser Leu Ser Met Pro Ala Ser Leu Gly Arg Met Asn Gln Gly  
       -5                          1                          5                          10  
 Thr Ala Arg Leu Ala Ser Leu Met Asn Leu Gly Met Ser Ser Ser Leu  
           15                          20                          25  
 Asn Gln Gln Gly Ala His Ser Ala Leu  
       30                          35

<210> 4182  
 <211> 357  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -27...-1  
 <223> score 11.7  
       seq LLLLLGLIDISQA/QL

<400> 4182  
 Met Met Met Lys Ile Pro Trp Gly Ser Ile Pro Val Leu Met Leu Leu  
           -25                          -20                          -15  
 Leu Leu Leu Gly Leu Ile Asp Ile Ser Gln Ala Gln Leu Ser Cys Thr  
       -10                          -5                          1                          5  
 Gly Pro Pro Ala Ile Pro Gly Ile Pro Gly Ile Pro Gly Thr Pro Gly  
           10                          15                          20  
 Pro Asp Gly Gln Pro Gly Thr Pro Gly Ile Lys Gly Glu Lys Gly Leu  
           25                          30                          35  
 Pro Gly Leu Ala Gly Asp His Gly Glu Phe Gly Glu Lys Gly Asp Pro  
       40                          45                          50  
 Gly Ile Pro Gly Asn Pro Gly Lys Val Gly Pro Lys Gly Pro Met Gly  
       55                          60                          65  
 Leu Lys Val Ala Gln Gly Pro Trp Ser Pro Gly Pro Lys Gly Glu Ser  
       70                          75                          80                          85  
 Gly Asp Tyr Lys Ala Thr Gln  
           90

<210> 4183  
 <211> 414  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -22...-1  
 <223> score 5.2  
       seq AGLLILSPLTVIS/DS

<400> 4183

004220"666ET560

Met Lys Arg Leu Ala Ala Arg Cys Phe Ala Gly Leu Leu Ile Leu Ser  
 -20 -15 -10  
 Pro Leu Thr Val Ile Ser Asp Ser Arg Pro Ala Asp Ser Gly Lys Ala  
 -5 1 5 10  
 Ile Glu Gly Asn Leu Glu Glu Met Glu Glu Val Arg Leu Lys Lys  
 15 20 25  
 Arg Lys Arg Arg Arg Asn Val Asp Lys Asp Pro Ala Lys Glu Asp Val  
 30 35 40  
 Glu Lys Ala Lys Lys Arg Arg Gly Arg Pro Pro Ala Glu Lys Leu Ser  
 45 50 55  
 Pro Asn Pro Pro Lys Leu Thr Lys Gln Met Asn Ala Ile Ile Asp Thr  
 60 65 70  
 Val Ile Asn Tyr Lys Asp Ser Ser Gly Arg Gln Leu Ser Glu Val Phe  
 75 80 85 90  
 Ile Gln Leu Pro Ser Arg Lys Glu Leu Pro Glu Tyr Tyr Glu Leu Ile  
 95 100 105  
 Arg Lys Pro Val Asp Phe Lys Lys Ile Lys  
 110 115

<210> 4184  
 <211> 381  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 10.1  
 seq TLLLLLLVPLIKP/AP

<400> 4184  
 Met Lys Thr Leu Gln Ser Thr Leu Leu Leu Leu Leu Val Pro Leu  
 -15 -10 -5  
 Ile Lys Pro Ala Pro Pro Thr Gln Gln Asp Ser Arg Ile Ile Tyr Asp  
 1 5 10  
 Tyr Gly Thr Asp Asn Phe Glu Glu Ser Ile Phe Ser Gln Asp Tyr Glu  
 15 20 25  
 Asp Lys Tyr Leu Asp Gly Lys Asn Ile Lys Glu Lys Glu Thr Val Ile  
 30 35 40 45  
 Ile Pro Asn Glu Lys Ser Leu Gln Leu Gln Lys Asp Glu Ala Ile Thr  
 50 55 60  
 Pro Leu Pro Pro Lys Xaa Glu Asn Asp Glu Met Pro Thr Cys Leu Leu  
 65 70 75  
 Cys Val Cys Leu Ser Gly Ser Val Tyr Cys Glu Glu Val Asp Ile Asp  
 80 85 90  
 Ala Val Pro Pro Leu Pro Arg Asn Gln Pro Ile Phe Thr His Asp  
 95 100 105

<210> 4185  
 <211> 381  
 <212> PRT  
 <213> Homo sapiens



<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 10.1  
 seq TLLLLLLVPLIKP/AP

<400> 4185  
 Met Lys Thr Leu Gln Ser Thr Leu Leu Leu Leu Leu Val Pro Leu  
                   -15                  -10                  -5  
 Ile Lys Pro Ala Pro Pro Thr Gln Gln Asp Xaa Arg Ile Ile Tyr Asp  
                   1                  5                  10  
 Tyr Gly Thr Asp Asn Phe Glu Glu Ser Ile Phe Ser Gln Asp Tyr Glu  
           15                  20                  25  
 Asp Lys Tyr Leu Asp Gly Lys Asn Ile Lys Glu Lys Glu Thr Val Ile  
 30                  35                  40                  45  
 Ile Pro Asn Glu Lys Ser Leu Gln Leu Gln Lys Asp Glu Ala Ile Thr  
                   50                  55                  60  
 Pro Leu Pro Pro Lys Xaa Glu Asn Asp Glu Met Pro Thr Cys Leu Leu  
                   65                  70                  75  
 Cys Val Cys Leu Ser Gly Ser Val Tyr Cys Glu Glu Val Asp Ile Asp  
           80                  85                  90  
 Ala Val Pro Pro Leu Pro Arg Asn Gln Pro Ile Phe Thr His Asp  
           95                  100                  105

<210> 4186  
 <211> 342  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -24...-1  
 <223> score 9.2  
 seq LVTLSVFLHVLHS/AP

<400> 4186  
 Met Asp Tyr Tyr Arg Lys Tyr Ala Ala Ile Phe Leu Val Thr Leu Ser  
                   -20                  -15                  -10  
 Val Phe Leu His Val Leu His Ser Ala Pro Asp Val Gln Asp Cys Pro  
                   -5                  1                  5  
 Glu Cys Thr Leu Gln Glu Asn Pro Phe Phe Ser Gln Pro Gly Ala Pro  
           10                  15                  20  
 Ile Leu Gln Cys Met Gly Cys Cys Phe Ser Arg Ala Tyr Pro Thr Pro  
 25                  30                  35                  40  
 Leu Arg Ser Lys Lys Thr Met Leu Val Gln Lys Asn Val Thr Ser Glu  
                   45                  50                  55  
 Ser Thr Cys Cys Val Ala Lys Ser Tyr Asn Arg Val Thr Val Met Gly  
           60                  65                  70  
 Gly Phe Lys Val Glu Asn His Thr Ala Cys His Cys Ser Thr Cys Tyr  
           75                  80                  85  
 Tyr His  
           90

004220-666T560

<210> 4187  
 <211> 216  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -22...-1  
 <223> score 8.4  
 seq SILLLFLTEAALG/DA

<400> 4187  
 Met Asp Pro Ala Arg Pro Leu Gly Leu Ser Ile Leu Leu Leu Phe Leu  
           -20                      -15                      -10  
 Thr Glu Ala Ala Leu Gly Asp Ala Ala Gln Glu Pro Thr Gly Asn Asn  
       -5                      1                      5                      10  
 Ala Glu Ile Cys Leu Leu Pro Leu Asp Xaa Gly Pro Cys Arg Ala Leu  
                       15                      20                      25  
 Leu Leu Arg Tyr Tyr Tyr Asp Arg Tyr Thr Gln Ser Cys Arg Gln Phe  
                       30                      35                      40  
 Leu Tyr Gly Gly Cys Glu Gly Asn  
       45                      50

<210> 4188  
 <211> 249  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -41...-1  
 <223> score 6.6  
 seq LFIFRMLVLGTAA/ES

<400> 4188  
 Met Gly Asp Trp Ser Phe Leu Gly Asn Phe Leu Glu Glu Val His Lys  
       -40                      -35                      -30  
 His Ser Thr Val Val Gly Lys Val Trp Leu Thr Val Leu Phe Ile Phe  
       -25                      -20                      -15                      -10  
 Arg Met Leu Val Leu Gly Thr Ala Ala Glu Ser Ser Trp Gly Asp Glu  
                       -5                      1                      5  
 Gln Ala Asp Phe Arg Cys Asp Thr Ile Gln Pro Gly Cys Gln Asn Val  
       10                      15                      20  
 Cys Tyr Asp Gln Ala Phe Pro Ile Gly Xaa Ile Arg Xaa Trp Val Leu  
       25                      30                      35  
 Gln Ile Ile  
 40

<210> 4189  
 <211> 294  
 <212> PRT

004220"566ET550

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -46...-1

<223> score 9.2

seq ILLLTAVESAWG/DE

<400> 4189

Met Gly Asp Trp Ser Ala Leu Gly Lys Leu Leu Asp Lys Val Gln Ala  
-45 -40 -35  
Tyr Ser Thr Ala Gly Gly Lys Val Trp Leu Ser Val Leu Phe Ile Phe  
-30 -25 -20 -15  
Arg Ile Leu Leu Leu Gly Thr Ala Val Glu Ser Ala Trp Gly Asp Glu  
-10 -5 1  
Gln Ser Ala Phe Arg Cys Asn Thr Gln Gln Pro Gly Cys Glu Asn Val  
5 10 15  
Cys Tyr Asp Lys Ser Phe Pro Ile Ser His Val Arg Phe Trp Val Leu  
20 25 30  
Gln Ile Ile Phe Val Ser Val Pro Thr Leu Leu Tyr Leu Ala His Val  
35 40 45 50  
Phe Tyr

<210> 4190

<211> 396

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -20...-1

<223> score 11.2

seq AFLLLVALSYTLA/RD

<400> 4190

Met Glu Lys Ile Pro Val Ser Ala Phe Leu Leu Leu Val Ala Leu Ser  
-20 -15 -10 -5  
Tyr Thr Leu Ala Arg Asp Thr Thr Val Lys Pro Gly Ala Lys Lys Asp  
1 5 10  
Thr Lys Asp Ser Arg Pro Lys Leu Pro Gln Thr Leu Ser Arg Gly Trp  
15 20 25  
Gly Asp Gln Leu Ile Trp Thr Gln Thr Tyr Glu Glu Ala Leu Tyr Lys  
30 35 40  
Ser Lys Thr Ser Asn Lys Pro Leu Met Ile Ile His His Leu Asp Glu  
45 50 55 60  
Cys Pro His Ser Gln Ala Leu Lys Lys Val Phe Ala Glu Asn Lys Glu  
65 70 75  
Ile Gln Lys Leu Ala Glu Gln Phe Val Leu Leu Asn Leu Val Tyr Glu  
80 85 90  
Thr Thr Asp Lys His Leu Ser Pro Asp Gly Gln Tyr Val Pro Gly Leu  
95 100 105  
Cys Leu Leu Thr

110

<210> 4191  
<211> 381  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -31..-1  
<223> score 10.1  
seq SLAFLLSLRGAGA/IK

<400> 4191  
Met Arg Pro Glu Asp Arg Met Phe His Ile Arg Ala Val Ile Leu Arg  
-30 -25 -20  
Ala Leu Ser Leu Ala Phe Leu Leu Ser Leu Arg Gly Ala Gly Ala Ile  
-15 -10 -5 1  
Lys Ala Asp His Val Ser Thr Tyr Ala Ala Phe Val Gln Thr His Arg  
5 10 15  
Pro Thr Gly Glu Phe Met Phe Glu Phe Asp Glu Asp Glu Met Phe Tyr  
20 25 30  
Val Asp Leu Asp Lys Lys Glu Thr Val Trp His Leu Glu Glu Phe Gly  
35 40 45  
Gln Ala Phe Ser Phe Glu Ala Gln Gly Gly Leu Ala Asn Ile Ala Ile  
50 55 60 65  
Leu Asn Asn Asn Leu Asn Thr Leu Ile Gln Arg Ser Asn His Thr Gln  
70 75 80  
Ala Thr Asn Asp Pro Pro Glu Val Thr Val Phe Pro Lys Glu Pro  
85 90 95

<210> 4192  
<211> 381  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -31..-1  
<223> score 10.1  
seq SLAFLLSLRGAGA/IK

<400> 4192  
Met Arg Pro Glu Asp Arg Met Phe His Ile Arg Ala Val Ile Leu Arg  
-30 -25 -20  
Ala Leu Ser Leu Ala Phe Leu Leu Ser Leu Arg Gly Ala Gly Ala Ile  
-15 -10 -5 1  
Lys Ala Asp His Val Ser Thr Tyr Ala Ala Phe Val Gln Thr His Arg  
5 10 15  
Pro Thr Gly Glu Phe Met Phe Glu Phe Asp Glu Asp Glu Met Phe Tyr  
20 25 30  
Val Asp Leu Asp Lys Lys Glu Thr Val Trp His Leu Glu Glu Phe Gly

35                      40                      45  
 Gln Ala Phe Ser Phe Glu Ala Gln Gly Gly Leu Ala Asn Ile Ala Ile  
 50                      55                      60                      65  
 Leu Asn Asn Asn Leu Asn Thr Leu Ile Gln Arg Ser Asn His Thr Gln  
                     70                      75                      80  
 Ala Thr Asn Asp Pro Pro Glu Val Thr Val Phe Pro Lys Glu Pro  
                     85                      90                      95

<210> 4193  
 <211> 318  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -18..-1  
 <223> score 10.5  
       seq VLTVLSLLPLLEA/QI

<400> 4193  
 Met Ala Leu Ser Trp Val Leu Thr Val Leu Ser Leu Leu Pro Leu Leu  
                     -15                      -10                      -5  
 Glu Ala Gln Ile Pro Leu Cys Ala Asn Leu Val Pro Val Pro Ile Thr  
                     1                      5                      10  
 Asn Ala Thr Leu Asp Xaa Ile Thr Gly Lys Trp Phe Tyr Ile Ala Ser  
 15                      20                      25                      30  
 Ala Phe Arg Asn Glu Glu Tyr Asn Lys Ser Val Gln Glu Ile Gln Ala  
                     35                      40                      45  
 Thr Phe Phe Tyr Phe Thr Pro Asn Lys Xaa Xaa Asp Thr Ile Phe Leu  
                     50                      55                      60  
 Arg Glu Tyr Gln Thr Arg Gln Asp Gln Cys Ile Tyr Asn Thr Thr Tyr  
                     65                      70                      75  
 Pro Xaa Ser Ser Leu Thr Leu Thr Lys Lys  
                     80                      85

<210> 4194  
 <211> 234  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -44..-1  
 <223> score 6.3  
       seq WLIFAFFVDTGFC/RV

<400> 4194  
 Met Ala His Cys Ser Leu Asp His Pro Gln Gly Ser Ser Asp Arg Ala  
                     -40                      -35                      -30  
 Thr Ser Ala Cys Trp Val Ala Gly Thr Ala Asp Arg His Pro Ala Trp  
                     -25                      -20                      -15  
 Leu Ile Phe Ala Phe Phe Val Asp Thr Gly Phe Cys Arg Val Ala Gln

-10                      -5                      1  
 Ala Gly Leu Asn Leu Leu Gly Ser Ser Gln Gln Pro Ala Ser Ala Ser  
 5                      10                      15                      20  
 Arg Cys Val Xaa Ile Thr Gly Ile Asn Tyr Tyr Ala Gln Leu  
                     25                      30

<210> 4195

<211> 474

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -41...-1

<223> score 4.3

seq VALFCGCGHEALS/GT

<400> 4195  
 Met Gly Cys Phe Glu Cys Cys Ile Lys Cys Leu Gly Gly Ile Pro Tyr  
       -40                      -35                      -30  
 Ala Ser Leu Ile Ala Thr Ile Leu Leu Tyr Ala Gly Val Ala Leu Phe  
       -25                      -20                      -15                      -10  
 Cys Gly Cys Gly His Glu Ala Leu Ser Gly Thr Val Asn Ile Leu Gln  
                     -5                      1                      5  
 Thr Tyr Phe Glu Met Ala Arg Thr Ala Gly Asp Thr Leu Asp Val Phe  
           10                      15                      20  
 Thr Met Ile Asp Ile Phe Lys Tyr Val Ile Tyr Gly Ile Ala Ala Ala  
       25                      30                      35  
 Phe Phe Val Tyr Gly Ile Leu Leu Met Val Glu Gly Phe Phe Thr Thr  
       40                      45                      50                      55  
 Gly Ala Ile Lys Asp Leu Tyr Gly Asp Phe Lys Ile Thr Thr Cys Gly  
                     60                      65                      70  
 Arg Cys Val Ser Ala Trp Phe Ile Met Leu Thr Tyr Leu Phe Met Leu  
           75                      80                      85  
 Ala Trp Leu Gly Val Thr Ala Phe Thr Ser Leu Pro Val Tyr Met Tyr  
           90                      95                      100  
 Phe Asn Leu Trp Thr Ile Cys Arg Asn Thr Thr Leu Val Glu  
       105                      110                      115

<210> 4196

<211> 252

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -20...-1

<223> score 4.4

seq LRYVASAVFGVIG/SQ

<400> 4196

Met Gly Leu Thr Lys Gln Tyr Leu Arg Tyr Val Ala Ser Ala Val Phe

# SECRET

```
<220>
<221> SIGNAL
<222> -16...-1
<223> score 8.9
      seq FLLSLPTPPSASG/HE
```

```
<210> 4198
<211> 315
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SIGNAL
<222> -27..-1
<223> score 5.2
      seq WMSALFLGVGVRA/EE
```

2631

Ser Ile Phe Ile Glu Asp Ala Ile Lys Tyr Phe Lys Glu Lys Val Ser  
40 45 50  
Thr Gln Asn Leu Leu Leu Leu Leu Thr Asp Asn Glu Ala Trp Asn Gly  
55 60 65  
Phe Val Ala Ala Ala Glu Leu Pro Arg  
70 75

<210> 4199  
<211> 186  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -20..-1  
<223> score 9.3  
seq LFLCYLLLFTCSG/VE

<400> 4199  
Met Arg Gln Lys Ala Val Ser Leu Phe Leu Cys Tyr Leu Leu Leu Phe  
-20 -15 -10 -5  
Thr Cys Ser Gly Val Glu Ala Gly Lys Lys Lys Cys Ser Glu Ser Ser  
1 5 10  
Asp Ser Gly Ser Gly Phe Trp Lys Ala Leu Thr Phe Met Ala Val Gly  
15 20 25  
Gly Xaa Leu Ala Val Ala Gly Leu Pro Ala Leu Gly Phe Thr  
30 35 40

<210> 4200  
<211> 411  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -18..-1  
<223> score 7.1  
seq IFVLLLSAIVSIS/AX

<400> 4200  
Met Tyr Gly Lys Ile Ile Phe Val Leu Leu Leu Ser Ala Ile Val Ser  
-15 -10 -5  
Ile Ser Ala Xaa Ser Thr Thr Gly Val Ala Met His Thr Ser Thr Ser  
1 5 10  
Ser Ser Val Thr Lys Ser Tyr Ile Ser Ser Gln Thr Asn Asp Thr His  
15 20 25 30  
Lys Arg Asp Thr Tyr Ala Ala Thr Pro Arg Ala His Glu Val Ser Glu  
35 40 45  
Ile Ser Val Arg Thr Val Tyr Pro Pro Glu Glu Glu Thr Gly Glu Arg  
50 55 60  
Val Gln Leu Ala His His Phe Ser Glu Pro Glu Ile Thr Leu Ile Ile  
65 70 75



Phe Gly Val Met Ala Gly Val Ile Gly Thr Ile Leu Leu Ile Ser Tyr  
 80 85 90  
 Gly Ile Arg Arg Leu Ile Lys Arg Gln Val Ile Asn Glu Asn Leu Phe  
 95 100 105 110  
 Thr Lys Pro Asn Val Glu Arg Thr Gln  
 115

<210> 4201  
 <211> 243  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -24...-1  
 <223> score 10.9  
 seq LAGLCCLVPVSLA/ED

<400> 4201  
 Met Pro Ser Ser Val Ser Trp Gly Ile Leu Leu Leu Ala Gly Leu Cys  
 -20 -15 -10  
 Cys Leu Val Pro Val Ser Leu Ala Glu Asp Pro Gln Gly Asp Ala Ala  
 -5 1 5  
 Gln Lys Thr Asp Thr Ser His His Asp Gln Asp His Pro Thr Phe Asn  
 10 15 20  
 Lys Ile Thr Pro Asn Leu Ala Glu Phe Ala Phe Ser Leu Tyr Ser Thr  
 25 30 35 40  
 His Ser Thr Gln Met Ser Thr Gln His Thr His Lys Arg Thr Ala His  
 45 50 55  
 Ile

<210> 4202  
 <211> 432  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -24...-1  
 <223> score 10.9  
 seq LAGLCCLVPVSLA/ED

<400> 4202  
 Met Pro Ser Ser Val Ser Trp Gly Ile Leu Leu Leu Ala Gly Leu Cys  
 -20 -15 -10  
 Cys Leu Val Pro Val Ser Leu Ala Glu Asp Pro Gln Gly Asp Ala Ala  
 -5 1 5  
 Gln Lys Thr Asp Thr Ser His His Asp Gln Asp His Pro Thr Phe Asn  
 10 15 20  
 Lys Ile Thr Pro Asn Leu Ala Glu Phe Ala Phe Ser Leu Tyr Arg Gln  
 25 30 35 40  
 Leu Ala His Gln Ser Asn Ser Thr Asn Ile Phe Phe Ser Pro Val Ser

45 50 55  
 Ile Ala Thr Ala Phe Ala Met Leu Ser Leu Gly Thr Lys Ala Asp Thr  
 60 65 70  
 His Asp Glu Ile Leu Glu Gly Leu Asn Phe Asn Leu Thr Glu Ile Pro  
 75 80 85  
 Glu Ala Gln Ile His Glu Gly Phe Gln Glu Leu Leu Arg Thr Leu Asn  
 90 95 100  
 Gln Pro Asp Ser Gln Leu Gln Leu Thr Thr Gly Asn Gly Leu Phe Leu  
 105 110 115 120

<210> 4203  
 <211> 333  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -22...-1  
 <223> score 8.6  
 seq PLPLLLVLALSQG/IL

<400> 4203  
 Met Gly Pro Glu Arg Thr Gly Ala Ala Pro Leu Pro Leu Leu Leu Val  
 -20 -15 -10  
 Leu Ala Leu Ser Gln Gly Ile Leu Asn Cys Cys Leu Ala Tyr Asn Val  
 -5 1 5 10  
 Gly Leu Pro Glu Ala Lys Ile Phe Ser Gly Pro Ser Ser Glu Gln Phe  
 15 20 25  
 Gly Tyr Ala Val Gln Gln Phe Ile Asn Pro Lys Gly Asn Trp Leu Leu  
 30 35 40  
 Val Gly Ser Pro Trp Ser Gly Phe Pro Glu Asn Arg Met Gly Asp Val  
 45 50 55  
 Tyr Lys Cys Pro Val Asp Leu Ser Thr Ala Thr Cys Glu Lys Leu Asn  
 60 65 70  
 Leu Gln Thr Ser Thr Ser Ile Pro Asn Val Thr Glu Met Xaa Thr  
 75 80 85

<210> 4204  
 <211> 552  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -14...-1  
 <223> score 5.9  
 seq AMRLILFFGALFG/HI

<400> 4204  
 Met Ala Met Arg Leu Ile Leu Phe Phe Gly Ala Leu Phe Gly His Ile  
 -10 -5 1  
 Tyr Cys Leu Glu Thr Phe Val Gly Asp Gln Val Leu Glu Ile Val Pro



<220>  
 <221> SIGNAL  
 <222> -28...-1  
 <223> score 12.5  
 seq LLLLLLLPLRGQA/NT

<400> 4206  
 Met Asp Val Gly Pro Ser Ser Leu Pro His Leu Gly Leu Lys Leu Leu  
                   -25                  -20                  -15  
 Leu Leu Leu Leu Leu Leu Pro Leu Arg Gly Gln Ala Asn Thr Gly Cys  
                   -10                  -5                  1  
 Tyr Gly Ile Pro Gly Met Pro Gly Leu Pro Gly Ala Pro Gly Lys Asp  
 5                  10                  15                  20  
 Gly Tyr Asp Gly Leu Pro Gly Pro Lys Gly Glu Pro Gly Ile Pro Ala  
                   25                  30                  35  
 Ile Pro Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu  
                   40                  45                  50  
 Pro Gly His Pro Gly Lys Asn Gly Pro Met Gly Pro Pro Gly Met Pro  
                   55                  60                  65

<210> 4207  
 <211> 393  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -18...-1  
 <223> score 8.2  
 seq LLLLLLSFLAPWA/TI

<400> 4207  
 Met Gly Arg Arg Ala Leu Leu Leu Leu Leu Ser Phe Leu Ala Pro  
                   -15                  -10                  -5  
 Trp Ala Thr Ile Ala Leu Arg Pro Xaa Leu Arg Ala Leu Gly Ser Leu  
                   1                  5                  10  
 His Leu Pro Thr Asn Pro Thr Ser Leu Pro Ala Val Ala Lys Asn Tyr  
 15                  20                  25                  30  
 Ser Val Leu Tyr Phe Gln Gln Lys Val Asp His Phe Gly Phe Asn Thr  
                   35                  40                  45  
 Val Lys Thr Phe Asn Gln Arg Tyr Leu Val Ala Asp Lys Tyr Trp Lys  
                   50                  55                  60  
 Lys Asn Gly Gly Ser Ile Leu Phe Tyr Thr Gly Asn Glu Gly Asp Ile  
                   65                  70                  75  
 Ile Trp Xaa Cys Asn Asn Thr Gly Phe Met Trp Asp Val Ala Glu Glu  
                   80                  85                  90  
 Leu Lys Ala Met Leu Val Phe Ala Glu His Arg Ile Leu Trp Lys Ser  
 95                  100                  105                  110  
 Leu Ser Pro

<210> 4208

004220" 6666T560

<211> 183  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SIGNAL  
 <222> -20..-1  
 <223> score 4.8  
 seq PLTVSLVLEGSEA/RH

<400> 4208  
 Met Ser Gly Ile Lys Pro Leu Pro Leu Thr Val Ser Leu Val Leu Glu  
 -20 -15 -10 -5  
 Gly Ser Glu Ala Arg His His Val Val Arg Val Val Tyr Gly Ser Arg  
 1 5 10  
 Val Leu Gly Tyr Ser Trp Gly Glu Cys Arg Leu Asn Gly Arg Ala Ala  
 15 20 25  
 Arg Ser Lys Arg Leu Thr Arg Arg Gly His Ser Pro Arg  
 30 35 40

<210> 4209  
 <211> 186  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SIGNAL  
 <222> -21..-1  
 <223> score 8.4  
 seq CAVLALVLAPAGA/FR

<400> 4209  
 Met Glu Arg Gly Leu Pro Leu Leu Cys Ala Val Leu Ala Leu Val Leu  
 -20 -15 -10  
 Ala Pro Ala Gly Ala Phe Arg Asn Asp Lys Cys Gly Asp Thr Ile Lys  
 -5 1 5 10  
 Ile Glu Ser Pro Gly Tyr Leu Thr Ser Pro Gly Tyr Pro His Ser Tyr  
 15 20 25  
 His Pro Ser Glu Lys Cys Glu Trp Leu Ile Gln Ala Pro Asp  
 30 35 40

<210> 4210  
 <211> 324  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -26..-1  
 <223> score 7.4  
 seq GVVVLLLLQGGSA/YK

<400> 4210

```

Met Gly Ala Thr Thr Met Asp Gln Lys Ser Leu Trp Ala Gly Val Val
  -25                -20                -15
Val Leu Leu Leu Leu Gln Gly Gly Ser Ala Tyr Lys Leu Val Cys Tyr
  -10                -5                1                5
Phe Thr Asn Trp Ser Gln Asp Arg Gln Glu Pro Gly Lys Phe Thr Pro
      10                15                20
Glu Asn Ile Asp Pro Phe Leu Cys Ser His Leu Ile Tyr Ser Phe Ala
      25                30                35
Ser Ile Glu Asn Asn Lys Val Ile Ile Lys Asp Lys Ser Glu Val Met
      40                45                50
Leu Tyr Gln Thr Ile Asn Ser Leu Lys Thr Lys Asn Pro Lys Leu Lys
55                60                65                70
Ile Leu Leu Ser Ile Gly Gly Tyr Cys Leu Val Pro
      75                80

```

<210> 4211

<211> 243

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -23...-1

<223> score 4.2

seq YLHLAFLMTTVFS/LS

<400> 4211

```

Met Pro Thr Asp Met Glu His Thr Gly His Tyr Leu His Leu Ala Phe
      -20                -15                -10
Leu Met Thr Thr Val Phe Ser Leu Ser Pro Gly Thr Lys Ala Asn Tyr
      -5                1                5
Thr Arg Leu Trp Ala Asn Ser Thr Ser Ser Trp Asp Ser Val Ile Gln
10                15                20                25
Asn Lys Thr Gly Arg Asn Gln Asn Glu Asn Ile Asn Thr Asn Pro Ile
      30                35                40
Thr Pro Glu Val Asp Tyr Lys Gly Asn Ser Thr Asn Met Pro Glu Thr
      45                50                55
Ser

```

<210> 4212

<211> 453

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -46...-1

<223> score 3.9

seq PTLFTSSMSQVLA/NS

<400> 4212  
 Met Asp Pro Lys Tyr Phe Ile Leu Ile Leu Phe Cys Gly His Leu Asn  
           -45                          -40                          -35  
 Asn Thr Phe Phe Ser Lys Thr Glu Thr Ile Thr Thr Glu Lys Gln Ser  
  -30                          -25                          -20                          -15  
 Gln Pro Thr Leu Phe Thr Ser Ser Met Ser Gln Val Leu Ala Asn Ser  
                           -10                          -5                          1  
 Gln Asn Thr Thr Gly Asn Pro Leu Gly Gln Pro Thr Gln Phe Ser Asp  
           5                          10                          15  
 Thr Phe Ser Gly Gln Ser Ile Ser Pro Ala Lys Val Thr Ala Gly Gln  
           20                          25                          30  
 Pro Thr Pro Ala Xaa Tyr Thr Ser Ser Glu Lys Pro Glu Ala His Thr  
  35                          40                          45                          50  
 Ser Ala Gly Gln Pro Leu Ala Tyr Asn Thr Lys Gln Pro Asn Thr Asn  
                           55                          60                          65  
 Ser Gln Xaa Leu Leu Pro Ala Ser Arg Val His Leu Cys Gln Thr Thr  
                           70                          75                          80  
 Thr Ile Cys Pro Tyr Phe Tyr His Thr Thr Thr Lys Val Ile Cys Leu  
           85                          90                          95  
 Tyr Phe Tyr Ser Thr Ile Ile  
           100                          105

<210> 4213  
 <211> 237  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -23...-1  
 <223> score 5.5  
       seq ALALXTVMSXCGG/EX

<400> 4213  
 Met Ile Leu Asn Lys Ala Leu Met Xaa Gly Ala Leu Ala Leu Xaa Thr  
                           -20                          -15                          -10  
 Val Met Ser Xaa Cys Gly Gly Glu Xaa Ile Xaa Xaa Asp His Val Ala  
           -5                          1                          5  
 Ser Tyr Xaa Val Asn Leu Tyr Xaa Xaa Tyr Gly Pro Ser Gly Gln Phe  
  10                          15                          20                          25  
 Thr His Glu Phe Asp Gly Asp Glu Glu Phe Tyr Val Asp Leu Glu Arg  
                           30                          35                          40  
 Xaa Glu Xaa Val Trp Lys Leu Pro Leu Phe His Arg Xaa Arg Phe  
           45                          50                          55

<210> 4214  
 <211> 291  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -23...-1

<223> score 6.9  
seq ALALTTVMSPCGG/ED

<400> 4214

```

Met Ile Leu Asn Lys Ala Leu Met Leu Gly Ala Leu Ala Leu Thr Thr
      -20              -15              -10
Val Met Ser Pro Cys Gly Gly Glu Asp Ile Val Ala Asp His Val Ala
      -5              1              5
Ser Tyr Gly Val Asn Leu Tyr Gln Ser Tyr Gly Pro Ser Gly Gln Tyr
10              15              20              25
Xaa His Glu Phe Asp Gly Asp Glu Xaa Phe Tyr Val Asp Leu Xaa Arg
      30              35              40
Lys Glu Thr Val Trp Xaa Leu Pro Val Xaa Arg Phe Arg Arg Phe Asp
      45              50              55
Pro Gln Phe Ala Leu Thr Asn Ile Ala Val Leu Lys His Asn Leu Asn
      60              65              70
Ile

```

<210> 4215  
<211> 423  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -16..-1  
<223> score 13.3  
seq LLLLLAFLPTGA/EA

<400> 4215

```

Met Gln Pro Leu Leu Leu Leu Ala Phe Leu Leu Pro Thr Gly Ala
      -15              -10              -5
Glu Ala Gly Glu Ile Ile Gly Gly Arg Glu Ser Arg Pro His Ser Arg
1              5              10              15
Pro Tyr Met Ala Tyr Leu Gln Ile Gln Ser Pro Ala Gly Gln Ser Arg
      20              25              30
Cys Gly Gly Phe Leu Val Arg Glu Asp Phe Val Leu Thr Ala Ala His
      35              40              45
Cys Trp Gly Ser Asn Ile Asn Val Thr Leu Gly Ala His Asn Ile Gln
      50              55              60
Arg Arg Glu Asn Thr Gln Gln His Ile Thr Ala Arg Arg Ala Ile Arg
65              70              75              80
His Pro Gln Tyr Asn Gln Arg Thr Ile Gln Asn Asp Ile Met Leu Leu
      85              90              95
Gln Leu Ser Arg Arg Val Arg Arg Asn Xaa Xaa Val Asn Pro Val Ala
      100              105              110
Leu Leu Glu Pro Gly Gly Thr Glu Thr Arg Asp Ala Val
      115              120              125

```

<210> 4216  
<211> 411  
<212> PRT



<213> Homo sapiens

<220>

<221> SIGNAL

<222> -17...-1

<223> score 6.9

seq LFLTMLTLALVKS/QD

<400> 4216

Met Leu Lys Ala Leu Phe Leu Thr Met Leu Thr Leu Ala Leu Val Lys  
-15 -10 -5  
Ser Gln Asp Thr Glu Glu Thr Ile Thr Tyr Thr Gln Cys Thr Asp Gly  
1 5 10 15  
Tyr Glu Trp Asp Pro Val Arg Gln Gln Cys Lys Asp Ile Asp Glu Cys  
20 25 30  
Asp Ile Val Pro Asp Ala Cys Xaa Gly Gly Met Lys Cys Val Asn His  
35 40 45  
Tyr Gly Gly Xaa Leu Cys Leu Pro Lys Thr Ala Gln Ile Ile Val Asn  
50 55 60  
Asn Glu Gln Pro Gln Gln Glu Thr Gln Pro Ala Glu Gly Thr Ser Gly  
65 70 75  
Ala Thr Thr Gly Val Val Ala Ala Xaa Ser Met Ala Thr Ser Xaa Val  
80 85 90 95  
Leu Xaa Gly Gly Gly Phe Val Ala Ser Ala Ala Val Ala Gly Pro  
100 105 110  
Glu Met Gln Thr Gly Arg Asn Asn Phe  
115 120

<210> 4217

<211> 411

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -33...-1

<223> score 8.5

seq LSFCVLLAGLCRG/NS

<400> 4217

Met Ala Thr Ala Gly Gly Gly Ser Gly Ala Asp Pro Gly Ser Arg Gly  
-30 -25 -20  
Leu Leu Arg Leu Leu Ser Phe Cys Val Leu Leu Ala Gly Leu Cys Arg  
-15 -10 -5  
Gly Asn Ser Val Glu Arg Lys Ile Tyr Ile Pro Leu Asn Lys Thr Ala  
1 5 10 15  
Pro Cys Val Arg Leu Leu Asn Ala Thr His Gln Ile Gly Cys Gln Ser  
20 25 30  
Ser Ile Ser Gly Asp Thr Gly Val Ile His Val Val Glu Lys Glu Glu  
35 40 45  
Asp Leu Gln Trp Val Leu Thr Asp Gly Pro Asn Pro Pro Tyr Met Val  
50 55 60

Leu Leu Glu Ser Lys His Phe Thr Arg Asp Leu Met Glu Lys Leu Lys  
65 70 75  
Gly Arg Thr Ser Arg Ile Ala Gly Leu Ala Val Ser Leu Thr Lys Pro  
80 85 90 95  
Ser Pro Ala Ser Gly Phe Ser Pro Ser  
100

<210> 4218  
<211> 372  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -17...-1  
<223> score 13  
seq IFFLLCLAGRALA/AP

<400> 4218  
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu  
-15 -10 -5  
Ala Ala Pro Gln Gln Glu Ala Leu Pro Asp Glu Thr Glu Val Val Glu  
1 5 10 15  
Glu Thr Val Ala Glu Val Thr Glu Val Ser Val Gly Ala Asn Pro Val  
20 25 30  
Gln Val Glu Val Gly Glu Phe Asp Asp Gly Ala Glu Glu Thr Glu Glu  
35 40 45  
Glu Val Val Ala Glu Asn Pro Cys Gln Asn His His Cys Lys His Gly  
50 55 60  
Lys Val Cys Glu Leu Asp Glu Asn Asn Thr Pro Met Cys Val Cys Gln  
65 70 75  
Asp Pro Thr Ser Cys Pro Ala Pro Ile Gly Glu Phe Glu Lys Val Cys  
80 85 90 95  
Ser Asn Asp Asn Lys Thr Phe Asp Ser Ser Cys His  
100 105

<210> 4219  
<211> 186  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -17...-1  
<223> score 13  
seq IFFLLCLAGRALA/AP

<400> 4219  
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu  
-15 -10 -5  
Ala Ala Pro Gln Gln Glu Ala Leu Pro Asp Glu Thr Glu Val Val Glu  
1 5 10 15

Glu Thr Val Ala Glu Val Thr Glu Val Ser Val Gly Ala Asn Pro Val  
                   20                  25                  30  
 Gln Val Glu Val Gly Glu Phe Ile Leu Asn Lys Gln Phe Arg  
                   35                  40                  45

<210> 4220  
 <211> 216  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -17...-1  
 <223> score 13  
       seq IFFLLCLAGRALA/AP

<400> 4220  
 Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu  
           -15                  -10                  -5  
 Ala Ala Pro Gln Gln Glu Ala Leu Pro Asp Glu Thr Glu Val Val Glu  
    1                  5                  10                  15  
 Glu Thr Val Ala Glu Val Thr Glu Val Ser Val Gly Ala Asn Pro Val  
                   20                  25                  30  
 Gln Asn Glu Ile His Cys Leu Leu Gln Thr Ser Thr Thr Lys Thr Ser  
           35                  40                  45  
 Val Leu Leu Leu Gly Ser His Leu  
       50                  55

<210> 4221  
 <211> 264  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -46...-1  
 <223> score 6.5  
       seq LLIFVLLPKVVNT/SD

<400> 4221  
 Met Lys Ser Ser Gly Pro Pro Ser Tyr Phe Ile Lys Arg Glu Ser Trp  
       -45                  -40                  -35  
 Gly Trp Thr Asp Phe Leu Met Asn Pro Met Val Met Met Met Val Leu  
       -30                  -25                  -20                  -15  
 Pro Leu Leu Ile Phe Val Leu Leu Pro Lys Val Val Asn Thr Ser Asp  
                   -10                  -5                  1  
 Pro Asp Met Arg Arg Glu Met Glu Gln Ser Met Asn Met Leu Asn Ser  
       5                  10                  15  
 Asn His Glu Leu Pro Asp Val Ser Glu Phe Met Thr Arg Leu Phe Ser  
       20                  25                  30  
 Ser Lys Ser Ser Gly Lys Ser Ser  
       35                  40

004220"666E1560

<210> 4222  
 <211> 270  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -48...-1  
 <223> score 4.1  
 seq VFMLIVSVLALIP/ET

<400> 4222  
 Met Asp Asn Val Gln Pro Lys Ile Lys His Arg Pro Phe Cys Phe Ser  
                   -45                  -40                  -35  
 Val Lys Gly His Val Lys Met Leu Arg Leu Asp Ile Ile Asn Ser Leu  
                   -30                  -25                  -20  
 Val Thr Thr Val Phe Met Leu Ile Val Ser Val Leu Ala Leu Ile Pro  
                   -15                  -10                  -5  
 Glu Thr Thr Thr Leu Thr Val Gly Gly Gly Val Phe Ala Leu Val Thr  
 1                  5                  10                  15  
 Ala Val Cys Cys Leu Ala Asp Gly Ala Leu Ile Tyr Arg Lys Leu Leu  
                   20                  25                  30  
 Phe Asn Pro Ser Gly Pro Tyr Gln Lys Lys  
                   35                  40

<210> 4223  
 <211> 432  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -27...-1  
 <223> score 8.6  
 seq ATVLLLSFGSVAA/SH

<400> 4223  
 Met Ala Val Thr Asp Ser Leu Ser Arg Ala Ala Thr Val Leu Ala Thr  
                   -25                  -20                  -15  
 Val Leu Leu Leu Ser Phe Gly Ser Val Ala Ala Ser His Ile Glu Asp  
                   -10                  -5                  1                  5  
 Gln Ala Glu Gln Phe Phe Arg Ser Gly His Thr Asn Asn Trp Ala Val  
                   10                  15                  20  
 Leu Val Cys Thr Ser Arg Phe Trp Phe Asn Tyr Arg His Val Ala Asn  
                   25                  30                  35  
 Thr Leu Ser Val Tyr Arg Ser Val Lys Arg Leu Gly Ile Pro Asp Ser  
                   40                  45                  50  
 His Ile Val Leu Met Leu Ala Asp Asp Met Ala Cys Asn Pro Arg Asn  
                   55                  60                  65  
 Pro Lys Pro Ala Thr Val Phe Ser His Lys Asn Met Glu Leu Asn Val  
 70                  75                  80                  85

Tyr Gly Asp Asp Val Glu Val Asp Tyr Arg Ser Tyr Glu Val Thr Val  
 90 95 100  
 Glu Asn Phe Leu Arg Val Xaa Thr Gly Arg Ile Pro Pro Ser Thr Pro  
 105 110 115

<210> 4224  
 <211> 381  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -23...-1  
 <223> score 4.1  
 seq LHILILILLFVAT/LD

<400> 4224  
 Met Ser Leu Leu Leu Val Val Ser Ala Leu His Ile Leu Ile Leu  
 -20 -15 -10  
 Ile Leu Leu Phe Val Ala Thr Leu Asp Lys Ser Xaa Trp Thr Leu Pro  
 -5 1 5  
 Gly Lys Glu Ser Leu Asn Leu Trp Tyr Asp Cys Thr Trp Asn Asn Asp  
 10 15 20 25  
 Thr Lys Thr Trp Ala Cys Ser Asn Val Ser Glu Asn Gly Trp Leu Lys  
 30 35 40  
 Ala Val Gln Val Leu Met Val Leu Ser Leu Ile Leu Cys Cys Leu Ser  
 45 50 55  
 Phe Ile Leu Phe Met Phe Gln Leu Tyr Thr Met Arg Arg Gly Gly Leu  
 60 65 70  
 Phe Tyr Ala Thr Gly Leu Cys Gln Leu Cys Thr Ser Val Ala Val Phe  
 75 80 85  
 Thr Xaa Ala Leu Ile Tyr Ala Ile His Ala Glu Glu Ile Leu Glu  
 90 95 100

<210> 4225  
 <211> 279  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -46...-1  
 <223> score 9.8  
 seq VLMVLSLILCCLS/FI

<400> 4225  
 Met Ser Leu Leu Leu Val Val Ser Ala Leu His Ile Leu Ile Leu  
 -45 -40 -35  
 Ile Leu Leu Phe Val Gly Xaa Phe Gly Gln Gly Trp Leu Lys Ala Val  
 -30 -25 -20 -15  
 Gln Val Leu Met Val Leu Ser Leu Ile Leu Cys Cys Leu Ser Phe Ile  
 -10 -5 1

Leu Phe Met Phe Gln Leu Tyr Xaa Met Arg Arg Gly Gly Leu Phe Tyr  
5 10 15  
Ala Xaa Gly Leu Cys Gln Leu Cys Thr Ser Val Ala Val Xaa Thr Xaa  
20 25 30  
Ala Leu Ile Tyr Ala Ile His Ala Glu Glu Ile Leu Glu  
35 40 45

<210> 4226  
<211> 411  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -39..-1  
<223> score 5.5  
seq LLLRAAFQSL LDA/QA

<400> 4226  
Met Glu Leu Ser Glu Ser Val Gln Lys Gly Phe Gln Met Leu Ala Asp  
-35 -30 -25  
Pro Arg Ser Phe Asp Ser Asn Ala Phe Thr Leu Leu Arg Ala Ala  
-20 -15 -10  
Phe Gln Ser Leu Leu Asp Ala Gln Ala Asp Glu Ala Val Leu Asp His  
-5 1 5  
Pro Asp Leu Lys His Ile Asp Pro Val Val Leu Lys His Cys His Ala  
10 15 20 25  
Ala Ala Ala Thr Tyr Ile Leu Glu Ala Gly Lys His Arg Ala Asp Lys  
30 35 40  
Ser Thr Leu Ser Thr Tyr Leu Glu Asp Cys Lys Phe Asp Arg Glu Arg  
45 50 55  
Ile Glu Leu Phe Cys Thr Glu Tyr Gln Asn Asn Lys Asn Ser Leu Glu  
60 65 70  
Ile Leu Leu Gly Ser Ile Gly Arg Ser Leu Pro His Ile Thr Asp Val  
75 80 85  
Ser Trp Arg Leu Glu Tyr Gln Ile Lys  
90 95

<210> 4227  
<211> 210  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -26..-1  
<223> score 9.3  
seq MXPLLWLLPXXWA/VP

<400> 4227  
Met Gly His Glu Gln Asn Gln Gly Ala Ala Leu Leu Gln Met Xaa Pro  
-25 -20 -15

Leu Leu Trp Leu Leu Pro Xaa Xaa Trp Ala Val Pro Glu Xaa Phe Pro  
 -10 -5 1 5  
 Ile Ala Glu Val Phe Thr Leu Lys Pro Leu Glu Phe Gly Lys Pro Asn  
 10 15 20  
 Thr Leu Val Cys Xaa Xaa Ser Asn Leu Phe Pro Pro Met Leu Thr Val  
 25 30 35  
 Xaa Xaa Gln His His Ser  
 40

<210> 4228  
 <211> 486  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -16..-1  
 <223> score 5.6  
 seq KWLLCMLLVLGTA/IV

<400> 4228  
 Met Glu Gly Lys Trp Leu Leu Cys Met Leu Leu Val Leu Gly Thr Ala  
 -15 -10 -5  
 Ile Val Glu Ala His Asp Gly His Asp Asp Val Ile Asp Ile Glu  
 1 5 10 15  
 Asp Asp Leu Asp Asp Val Ile Glu Glu Val Glu Asp Ser Lys Pro Asp  
 20 25 30  
 Thr Thr Ala Pro Pro Ser Ser Pro Lys Val Thr Tyr Lys Ala Pro Val  
 35 40 45  
 Pro Thr Gly Glu Val Tyr Phe Ala Asp Ser Phe Asp Arg Gly Thr Leu  
 50 55 60  
 Ser Gly Trp Ile Leu Ser Lys Ala Lys Lys Asp Asp Thr Asp Asp Glu  
 65 70 75 80  
 Ile Ala Lys Tyr Asp Gly Lys Trp Glu Val Glu Glu Met Lys Glu Ser  
 85 90 95  
 Lys Leu Pro Gly Asp Lys Gly Leu Val Leu Met Ser Arg Ala Lys His  
 100 105 110  
 His Ala Ile Ser Ala Lys Leu Asn Lys Pro Phe Leu Phe Asp Thr Lys  
 115 120 125  
 Pro Leu Ile Val Gln Tyr Glu Val Asn Phe Gln Asn Gly Ile Glu Cys  
 130 135 140  
 Gly Gly  
 145

<210> 4229  
 <211> 486  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -16..-1  
 <223> score 5.6

004220" 6667560

seq KWLLCMLLVLGTA/IV

<400> 4229

Met Glu Gly Lys Trp Leu Leu Cys Met Leu Leu Val Leu Gly Thr Ala  
 -15 -10 -5  
 Ile Val Glu Ala His Asp Gly His Asp Asp Asp Val Ile Asp Ile Glu  
 1 5 10 15  
 Asp Asp Leu Asp Asp Val Ile Glu Glu Val Glu Asp Ser Lys Pro Asp  
 20 25 30  
 Thr Thr Ala Pro Pro Ser Ser Pro Lys Val Thr Tyr Lys Ala Pro Val  
 35 40 45  
 Pro Thr Gly Glu Val Tyr Phe Ala Asp Ser Phe Asp Arg Gly Thr Leu  
 50 55 60  
 Ser Gly Trp Ile Leu Ser Lys Ala Lys Lys Asp Asp Thr Asp Asp Glu  
 65 70 75 80  
 Ile Ala Lys Tyr Asp Gly Lys Trp Glu Val Glu Glu Met Lys Glu Ser  
 85 90 95  
 Lys Leu Pro Gly Asp Lys Gly Leu Val Leu Met Ser Arg Ala Lys His  
 100 105 110  
 His Ala Ile Ser Ala Lys Leu Asn Lys Pro Phe Leu Phe Asp Thr Lys  
 115 120 125  
 Pro Leu Ile Val Gln Tyr Glu Val Asn Phe Gln Asn Gly Ile Glu Cys  
 130 135 140  
 Gly Gly  
 145

<210> 4230

<211> 252

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -16..-1

<223> score 11.9

seq VLLSVVLLALSSA/QS

<400> 4230

Met Leu Leu Val Leu Leu Ser Val Val Leu Leu Ala Leu Ser Ser Ala  
 -15 -10 -5  
 Gln Ser Thr Asp Asn Asp Val Asn Tyr Glu Asp Phe Thr Phe Thr Ile  
 1 5 10 15  
 Pro Asp Val Glu Asp Ser Ser Gln Arg Pro Asp Gln Gly Pro Gln Arg  
 20 25 30  
 Pro Pro Pro Glu Gly Leu Leu Pro Arg Pro Pro Gly Asp Ser Gly Asn  
 35 40 45  
 Gln Asp Asp Gly Pro Gln Gln Arg Pro Pro Lys Pro Gly Gly His His  
 50 55 60  
 Arg His Pro Pro  
 65

<210> 4231



<211> 450  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -30..-1  
 <223> score 12.2  
 seq LLLLLLLCVFLVKS/QG

<400> 4231  
 Met Lys Arg Met Val Ser Trp Ser Phe His Lys Leu Lys Thr Met Lys  
 -30 -25 -20 -15  
 His Leu Leu Leu Leu Leu Leu Cys Val Phe Leu Val Lys Ser Gln Gly  
 -10 -5 1  
 Val Asn Asp Asn Glu Glu Gly Phe Phe Ser Ala Arg Gly His Arg Pro  
 5 10 15  
 Leu Asp Lys Lys Arg Glu Glu Ala Pro Ser Leu Arg Pro Ala Pro Pro  
 20 25 30  
 Pro Ile Ser Gly Gly Gly Tyr Arg Ala Arg Pro Ala Lys Ala Ala Ala  
 35 40 45 50  
 Thr Gln Lys Lys Val Glu Arg Lys Ala Pro Asp Ala Gly Gly Cys Leu  
 55 60 65  
 His Ala Asp Pro Asp Leu Gly Val Leu Cys Pro Thr Gly Cys Gln Leu  
 70 75 80  
 Gln Glu Ala Leu Leu Gln Gln Glu Arg Pro Ile Arg Asn Ser Val Asp  
 85 90 95  
 Glu Leu Asn Asn Asn Val Glu Ala Val Ser Gln Thr Ser Ser Ser Ser  
 100 105 110  
 Phe Gln Tyr Met Tyr Leu  
 115 120

<210> 4232  
 <211> 354  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -30..-1  
 <223> score 12.2  
 seq LLLLLLLCVFLVKS/QG

<400> 4232  
 Met Lys Arg Met Val Ser Trp Ser Phe His Lys Leu Lys Thr Met Lys  
 -30 -25 -20 -15  
 His Leu Leu Leu Leu Leu Cys Val Phe Leu Val Lys Ser Gln Gly  
 -10 -5 1  
 Val Asn Asp Asn Glu Glu Gly Phe Phe Ser Ala Arg Gly His Arg Pro  
 5 10 15  
 Leu Asp Lys Lys Arg Val Pro Ser Arg Val Ala Gly Thr Thr Gly Thr  
 20 25 30

Arg His His Ala Gln Leu Ile Phe Val Phe Leu Val Glu Thr Gly Phe  
 35 40 45 50  
 His Leu Ile Gly Gln Val Gly Leu Glu Leu Gln Thr Ser Ser His Leu  
 55 60 65  
 Pro Thr Ser Ala Ser Gln Ser Val Gly Ile Ser Gly Gly Ser His Cys  
 70 75 80  
 Thr Ser Thr Pro Asn Ala  
 85

<210> 4233  
 <211> 237  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -40..-1  
 <223> score 4.3  
 seq LVPVFLLPAKLAS/AQ

<400> 4233  
 Met Asp Ala Glu Val Gly Trp Gln Pro Ser Ala Arg Leu Pro Gly Ser  
 -40 -35 -30 -25  
 Arg Val Glu Ala Ile Pro Thr Glu Ser Ile Trp Leu Val Pro Val Phe  
 -20 -15 -10  
 Leu Leu Pro Ala Lys Leu Ala Ser Ala Gln Val Gln Ile Leu Cys His  
 -5 1 5  
 Thr Tyr Trp Glu His Trp Thr Ser Gln Gly Gln Val Arg Met Arg Leu  
 10 15 20  
 Phe Gly Gln Arg Cys Gln Lys Cys Ser Trp Ser Gln Tyr Glu Met  
 25 30 35

<210> 4234  
 <211> 297  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -14..-1  
 <223> score 4  
 seq ALLTAFSSSVAVT/DK

<400> 4234  
 Met Ala Leu Leu Thr Ala Phe Ser Ser Ser Val Ala Val Thr Asp Lys  
 -10 -5 1  
 Asp Thr Phe Glu Leu Ser Thr Phe Leu Asp Ser Ser Lys Ala Pro Gln  
 5 10 15  
 His Asp Arg Asn Glu Leu Pro Glu Gln Arg Gly Val Gly Gly Gly Leu  
 20 25 30  
 Asp Val Pro Phe Asp Xaa Ser Gly Leu Gly Ala Glu Glu Ser Leu Gly  
 35 40 45 50

Leu Leu Asp Asp Tyr Leu Xaa Val Ala Lys His Phe Lys Pro His Gly  
                           55                          60                          65  
 Phe Ser Ser Asp Lys Ala Lys Ala Gly Ser Ser Glu Trp Leu Ala Val  
                           70                          75                          80  
 Asp Gly Leu  
                           85

<210> 4235  
 <211> 189  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -22...-1  
 <223> score 3.7  
       seq VGASASATPVVRA/AR

<400> 4235  
 Met Ala Arg Phe Asp Ser Gly Val Gly Val Gly Ala Ser Ala Ser Ala  
           -20                          -15                          -10  
 Thr Pro Val Val Arg Ala Ala Arg Ala Trp Glu Leu Thr Pro Leu Thr  
           -5                          1                          5                          10  
 Asp Pro Gln Ser Gln Ser Gln Arg Cys Glu Glu Thr Ser Thr Leu Pro  
                           15                          20                          25  
 Gly Pro Gln Gly Gln Arg Gly Ser Ala Ser Glu Ala Pro Phe Xaa  
                           30                          35                          40

<210> 4236  
 <211> 321  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -23...-1  
 <223> score 13.6  
       seq LVLLLLLVLLPTDA/SV

<400> 4236  
 Met Gly Lys Asn Lys Leu Leu His Pro Ser Leu Val Leu Leu Leu Leu  
           -20                          -15                          -10  
 Val Leu Leu Pro Thr Asp Ala Ser Val Ser Gly Lys Pro Gln Tyr Met  
           -5                          1                          5  
 Val Leu Val Pro Ser Leu Leu His Thr Glu Thr Thr Glu Lys Gly Cys  
   10                          15                          20                          25  
 Val Leu Leu Ser Tyr Leu Asn Glu Thr Val Thr Val Ser Ala Ser Leu  
                           30                          35                          40  
 Glu Ser Val Arg Gly Asn Arg Ser Leu Phe Thr Asp Leu Glu Ala Glu  
           45                          50                          55  
 Asn Asp Val Leu His Cys Val Ala Phe Ala Val Pro Lys Ser Ser Ser  
           60                          65                          70

Asn Glu Glu Val Met Phe Leu Thr Val Gln Val  
75 80

<210> 4237  
<211> 282  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -27...-1  
<223> score 9.8  
seq LIPLIFLISGAEA/AS

<400> 4237  
Met Ala Glu Ala Lys Thr His Trp Leu Gly Ala Ala Leu Ser Leu Ile  
-25 -20 -15  
Pro Leu Ile Phe Leu Ile Ser Gly Ala Glu Ala Ala Ser Phe Gln Arg  
-10 -5 1 5  
Asn Gln Leu Leu Gln Lys Glu Pro Asp Leu Arg Leu Glu Asn Val Gln  
10 15 20  
Lys Phe Pro Ser Pro Glu Met Ile Arg Ala Leu Glu Tyr Ile Glu Asn  
25 30 35  
Leu Arg Gln Gln Ala His Lys Glu Glu Ser Ser Pro Asp Tyr Asn Pro  
40 45 50  
Tyr Gln Gly Val Ser Val Pro Leu Gln Gln Lys Glu Asn Gly  
55 60 65

<210> 4238  
<211> 441  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -30...-1  
<223> score 8.8  
seq ALLLALGVERALA/LP

<400> 4238  
Met Ala Pro His Gly Pro Gly Ser Leu Thr Thr Leu Val Pro Trp Ala  
-30 -25 -20 -15  
Ala Ala Leu Leu Leu Ala Leu Gly Val Glu Arg Ala Leu Ala Leu Pro  
-10 -5 1  
Glu Ile Cys Thr Gln Cys Pro Gly Ser Val Gln Asn Leu Ser Lys Val  
5 10 15  
Ala Phe Tyr Cys Lys Thr Thr Arg Glu Leu Met Leu His Ala Arg Cys  
20 25 30  
Cys Leu Asn Gln Lys Gly Thr Ile Leu Gly Leu Asp Leu Gln Asn Cys  
35 40 45 50  
Ser Leu Glu Asp Pro Gly Pro Asn Phe His Gln Ala His Thr Thr Val  
55 60 65

Ile Ile Asp Leu Gln Ala Asn Pro Leu Lys Gly Asp Leu Ala Asn Thr  
70 75 80  
Phe Arg Gly Phe Thr Gln Leu Gln Thr Leu Ile Leu Pro Gln His Val  
85 90 95  
Asn Cys Pro Gly Gly Ile Asn Ala Trp Asn Thr Ile Thr Ser Tyr Ile  
100 105 110  
Asp Asn Gln  
115

<210> 4239  
<211> 294  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -21...-1  
<223> score 7.9  
seq GLVLATLLSQVSP/FK

<400> 4239  
Met Glu His Ser Thr Phe Leu Ser Gly Leu Val Leu Ala Thr Leu Leu  
-20 -15 -10  
Ser Gln Val Ser Pro Phe Lys Ile Pro Ile Glu Glu Leu Glu Asp Arg  
-5 1 5 10  
Val Phe Val Asn Cys Asn Thr Ser Ile Thr Xaa Val Glu Gly Thr Val  
15 20 25  
Gly Thr Leu Leu Ser Asp Ile Thr Arg Leu Asp Leu Gly Lys Arg Ile  
30 35 40  
Leu Asp Pro Arg Gly Ile Tyr Arg Cys Asn Gly Thr Asp Ile Tyr Lys  
45 50 55  
Asp Lys Glu Ser Thr Val Gln Val His Tyr Arg Met Cys Gln Ser Cys  
60 65 70 75  
Val Glu

<210> 4240  
<211> 204  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -39...-1  
<223> score 3.7  
seq VFFSPMSMSCALA/MV

<400> 4240  
Met Asp Val Leu Ala Glu Ala Asn Gly Thr Phe Ala Leu Asn Leu Leu  
-35 -30 -25  
Lys Thr Leu Gly Lys Asp Asn Ser Lys Asn Val Phe Phe Ser Pro Met  
-20 -15 -10  
Ser Met Ser Cys Ala Leu Ala Met Val Tyr Met Gly Ala Lys Gly Asn

Thr Ala Ala Gln Met Ala Gln Ile Leu Ser Phe Asn Lys Ser Gly Gly  
10 15 20 25  
Gly Gly Asp Thr

<210> 4241  
<211> 162  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -23...-1  
<223> score 4  
seq AAAAVAAAAAVTA/GE

<400> 4241  
Met Ala Thr Val Ala Ala Asn Pro Ala Ala Ala Ala Val Ala  
-20 -15 -10  
Ala Ala Ala Val Thr Ala Gly Glu Trp His Glu Pro Gln Gly Ala  
-5 1 5  
Gly Leu Gln Glu Ala Lys Ile Ala Pro Leu His Ser Ser Leu Gly Asp  
10 15 20 25  
Ser Glu Thr Pro Ser Gln  
30

<210> 4242  
<211> 228  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -29...-1  
<223> score 7.1  
seq LLFLLSAVYLGPG/CQ

<400> 4242  
Met Pro Gly Gly Pro Gly Val Leu Gln Ala Leu Pro Ala Thr Ile Phe  
-25 -20 -15  
Leu Leu Phe Leu Leu Ser Ala Val Tyr Leu Gly Pro Gly Cys Gln Ala  
-10 -5 1  
Leu Trp Met His Lys Val Pro Ala Ser Leu Met Val Ser Leu Gly Glu  
5 10 15  
Asp Ala His Phe Gln Cys Pro His Asn Ser Ser Asn Asn Ala Asn Val  
20 25 30 35  
Thr Trp Trp Arg Val Leu His Gly Asn Tyr Thr Trp  
40 45

<210> 4243  
<211> 228  
<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -41..-1

<223> score 3.6

seq AGAGLPALDLAKA/QR

<400> 4243

Met	Gly	Thr	Pro	Gly	Glu	Gly	Leu	Gly	Arg	Cys	Ser	His	Ala	Leu	Ile
-40						-35					-30				
Arg	Gly	Val	Pro	Glu	Ser	Leu	Ala	Ser	Gly	Glu	Gly	Ala	Gly	Ala	Gly
-25					-20				-15						-10
Leu	Pro	Ala	Leu	Asp	Leu	Ala	Lys	Ala	Gln	Arg	Glu	His	Gly	Val	Leu
				-5					1				5		
Gly	Gly	Lys	Leu	Arg	Gln	Arg	Leu	Gly	Leu	Gln	Leu	Leu	Glu	Leu	Pro
	10					15					20				
Pro	Glu	Glu	Ser	Leu	Pro	Leu	Gly	Pro	Leu	Leu	Gly				
25						30					35				

<210> 4244

<211> 351

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -29..-1

<223> score 8.5

seq LLGLLMAACFTFC/LS

<400> 4244

Met	Ala	Pro	Gln	Ser	Leu	Pro	Ser	Ser	Arg	Met	Ala	Pro	Leu	Gly	Met
				-25					-20					-15	
Leu	Leu	Gly	Leu	Leu	Met	Ala	Ala	Cys	Phe	Thr	Phe	Cys	Leu	Ser	His
			-10					-5					1		
Gln	Asn	Leu	Lys	Glu	Phe	Ala	Leu	Thr	Asn	Pro	Glu	Lys	Ser	Ser	Thr
5						10					15				
Lys	Glu	Thr	Glu	Arg	Lys	Glu	Thr	Lys	Ala	Glu	Glu	Glu	Leu	Asp	Ala
20					25					30					35
Glu	Val	Leu	Glu	Val	Phe	His	Pro	Thr	His	Glu	Trp	Gln	Ala	Leu	Gln
				40					45					50	
Pro	Gly	Gln	Ala	Val	Pro	Ala	Gly	Ser	His	Val	Arg	Leu	Asn	Leu	Gln
			55					60					65		
Thr	Gly	Glu	Arg	Glu	Ala	Lys	Leu	Gln	Tyr	Glu	Asp	Lys	Phe	Arg	Asn
	70						75					80			
Asn	Leu	Lys	Gly	Lys											
85															

<210> 4245

<211> 423

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -26...-1

<223> score 8.3

seq CLLLCGSITLALG/NA

<400> 4245

Met	Arg	Gly	Gly	Lys	Cys	Asn	Met	Leu	Ser	Ser	Leu	Gly	Cys	Leu	Leu	
-25						-20					-15					
Leu	Cys	Gly	Ser	Ile	Thr	Leu	Ala	Leu	Gly	Asn	Ala	Gln	Lys	Leu	Pro	
-10				-5					1				5			
Lys	Gly	Lys	Arg	Pro	Asn	Leu	Lys	Val	His	Ile	Asn	Thr	Thr	Ser	Asp	
			10				15					20				
Ser	Ile	Leu	Leu	Lys	Phe	Leu	Arg	Pro	Ser	Pro	Asn	Val	Lys	Leu	Glu	
	25					30					35					
Gly	Leu	Leu	Leu	Gly	Tyr	Gly	Ser	Asn	Val	Ser	Pro	Asn	Gln	Tyr	Phe	
40				45						50						
Pro	Leu	Pro	Ala	Glu	Gly	Lys	Phe	Thr	Glu	Ala	Ile	Val	Asp	Ala	Glu	
55				60						65						
Pro	Lys	Tyr	Leu	Ile	Val	Val	Arg	Pro	Ala	Pro	Pro	Pro	Ser	Gln	Lys	
			75					80						85		
Lys	Ser	Cys	Ser	Gly	Lys	Thr	Arg	Ser	Arg	Lys	Pro	Leu	Gln	Leu	Val	
		90					95						100			
Val	Gly	Thr	Leu	Thr	Pro	Ser	Ser	Val	Phe	Leu	Ser	Trp				
	105					110						115				

<210> 4246

<211> 255

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -23...-1

<223> score 4

seq LLLXLHWKHGAGS/PL

<400> 4246

Met	Lys	Val	Leu	Ala	Ala	Gly	Val	Val	Pro	Leu	Leu	Leu	Xaa	Leu	His	
		-20						-15					-10			
Trp	Lys	His	Gly	Ala	Gly	Ser	Pro	Leu	Pro	Ile	Thr	Pro	Val	Asn	Ala	
	-5					1				5						
Thr	Cys	Ala	Ile	Arg	His	Pro	Cys	His	Asn	Asn	Leu	Met	Asn	Gln	Ile	
10				15					20					25		
Arg	Ser	Gln	Leu	Ala	Gln	Leu	Asn	Gly	Ser	Ala	Asn	Ala	Leu	Phe	Ile	
			30					35						40		
Leu	Tyr	Tyr	Thr	Ala	Gln	Gly	Glu	Pro	Phe	Pro	Asn	Asn	Leu	Asp	Lys	
		45					50						55			
Leu	Cys	Gly	Pro	Asn												
	60															



<210> 4247  
 <211> 315  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 11.7  
 seq IALLLTVLQVSRG/QK

<400> 4247  
 Met Asn Leu Ala Ile Ser Ile Ala Leu Leu Leu Thr Val Leu Gln Val  
                     -15                    -10                    -5  
 Ser Arg Gly Gln Lys Val Thr Ser Leu Thr Ala Cys Leu Val Asp Gln  
                     1                    5                    10  
 Ser Leu Arg Leu Asp Cys Arg His Glu Asn Thr Ser Ser Ser Pro Ile  
     15                    20                    25  
 Gln Tyr Glu Phe Ser Leu Thr Arg Glu Thr Lys Lys His Val Leu Phe  
 30                    35                    40                    45  
 Gly Thr Val Gly Val Pro Glu His Thr Tyr Arg Ser Arg Thr Asn Phe  
                     50                    55                    60  
 Thr Ser Lys Tyr Asn Met Lys Val Leu Tyr Leu Ser Ala Ser Leu Ala  
                     65                    70                    75  
 Arg Thr Arg Ala Leu His Val Cys Thr  
     80                    85

<210> 4248  
 <211> 228  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -37...-1  
 <223> score 3.6  
 seq PLSLDCGHSFCQA/CI

<400> 4248  
 Met Asp Phe Ser Val Lys Val Asp Ile Glu Lys Glu Val Thr Cys Pro  
     -35                    -30                    -25  
 Ile Cys Leu Glu Leu Leu Thr Glu Pro Leu Ser Leu Asp Cys Gly His  
     -20                    -15                    -10  
 Ser Phe Cys Gln Ala Cys Ile Thr Ala Lys Ile Lys Glu Ser Val Ile  
     -5                    1                    5                    10  
 Ile Ser Arg Gly Glu Ser Ser Cys Pro Val Cys Gln Xaa Arg Xaa Gln  
                     15                    20                    25  
 Pro Gly Asn Leu Arg Pro Asn Arg His Leu Ala Asn  
     30                    35

<210> 4249

004220"666E7560

<211> 588  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19..-1  
 <223> score 11.8  
 seq ALLVCAVLGLCLA/VP

<400> 4249  
 Met Arg Leu Ala Val Gly Ala Leu Leu Val Cys Ala Val Leu Gly Leu  
                   -15                  -10                  -5  
 Cys Leu Ala Val Pro Asp Lys Thr Val Arg Trp Cys Ala Val Ser Glu  
                   1                  5                  10  
 His Glu Ala Thr Lys Cys Gln Ser Phe Arg Asp His Met Lys Ser Val  
           15                  20                  25  
 Ile Pro Ser Asp Gly Pro Ser Val Ala Cys Val Lys Lys Ala Ser Tyr  
 30                  35                  40                  45  
 Leu Asp Cys Ile Arg Ala Ile Ala Ala Asn Glu Ala Asp Ala Val Thr  
                   50                  55                  60  
 Leu Asp Ala Gly Leu Val Tyr Asp Ala Tyr Leu Ala Pro Asn Asn Leu  
                   65                  70                  75  
 Lys Pro Val Val Ala Glu Phe Tyr Gly Ser Lys Glu Asp Pro Gln Thr  
           80                  85                  90  
 Phe Tyr Tyr Ala Val Ala Val Val Lys Lys Asp Ser Gly Phe Gln Met  
           95                  100                  105  
 Asn Gln Leu Arg Gly Lys Lys Ser Cys His Thr Gly Leu Gly Arg Ser  
 110                  115                  120                  125  
 Ala Gly Trp Asn Ile Pro Ile Gly Leu Leu Tyr Cys Asp Leu Pro Glu  
                   130                  135                  140  
 Pro Arg Lys Pro Leu Glu Lys Ala Val Ala Asn Phe Phe Ser Gly Ser  
           145                  150                  155  
 Cys Ala Pro Cys Ala Asp Gly Thr Asp Phe Pro Gln Leu Cys Gln Leu  
           160                  165                  170  
 Cys Pro Gly Cys  
           175

<210> 4250  
 <211> 264  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19..-1  
 <223> score 7.4  
 seq LLAAVSILSACQQ/SY

<400> 4250  
 Met Ala Gly Asn Ser Ile Leu Leu Ala Ala Val Ser Ile Leu Ser Ala  
                   -15                  -10                  -5

Cys Gln Gln Ser Tyr Phe Ala Leu Gln Val Gly Lys Ala Arg Leu Lys  
1 5 10  
Tyr Lys Val Thr Pro Pro Ala Val Thr Gly Ser Pro Glu Phe Glu Arg  
15 20 25  
Val Phe Arg Ala Gln Gln Asn Cys Val Glu Phe Tyr Pro Ile Phe Ile  
30 35 40 45  
Ile Thr Leu Trp Met Ala Gly Trp Tyr Phe Asn Gln Val Phe Ala Thr  
50 55 60  
Xaa Xaa Gly Leu Val Tyr Ile Tyr  
65

<210> 4251  
<211> 312  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -28...-1  
<223> score 3.9  
seq FQSFSSASSPVNC/QW

<400> 4251  
Met Lys Val Ile Ser Leu Phe Ile Leu Val Gly Phe Ile Gly Glu Phe  
-25 -20 -15  
Gln Ser Phe Ser Ser Ala Ser Ser Pro Val Asn Cys Gln Trp Asp Phe  
-10 -5 1  
Tyr Ala Pro Trp Ser Glu Cys Asn Gly Cys Thr Lys Thr Gln Thr Arg  
5 10 15 20  
Arg Arg Ser Val Ala Val Tyr Gly Gln Tyr Gly Gly Gln Pro Cys Val  
25 30 35  
Gly Asn Ala Phe Glu Thr Gln Ser Cys Glu Pro Thr Arg Gly Cys Pro  
40 45 50  
Thr Glu Glu Gly Cys Gly Glu Arg Phe Arg Cys Phe Ser Gly Gln Cys  
55 60 65  
Ile Ser Lys Ser Trp Phe Ala Trp  
70 75

<210> 4252  
<211> 330  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -19...-1  
<223> score 13.5  
seq LLLLLSACLAVSA/GP

<400> 4252  
Met Arg Ser Leu Gly Ala Leu Leu Leu Leu Ser Ala Cys Leu Ala  
-15 -10 -5

Val Ser Ala Gly Pro Val Pro Thr Pro Pro Asp Asn Ile Gln Val Gln  
1 5 10  
Glu Asn Phe Asn Ile Ser Arg Ile Tyr Gly Lys Trp Tyr Asn Leu Ala  
15 20 25  
Ile Gly Ser Thr Cys Pro Trp Leu Lys Lys Ile Met Asp Arg Met Thr  
30 35 40 45  
Val Ser Thr Leu Val Leu Gly Glu Gly Ala Thr Glu Ala Glu Ile Ser  
50 55 60  
Met Thr Ser Thr Arg Trp Arg Lys Gly Val Cys Glu Arg Arg Leu Glu  
65 70 75  
Leu Met Xaa Lys Gln Xaa Leu Met Gly Ser Phe Ser Ile Thr  
80 85 90

<210> 4253  
<211> 252  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -21...-1  
<223> score 12.9  
seq LLLLLLLTLLGLG/LV

<400> 4253  
Met Ala Leu Gln Arg Thr His Ser Leu Leu Leu Leu Leu Leu Thr  
-20 -15 -10  
Leu Leu Gly Leu Gly Leu Val Gln Pro Ser Tyr Gly Gln Asp Gly Met  
-5 1 5 10  
Tyr Gln Arg Phe Leu Arg Gln His Val His Pro Glu Glu Thr Gly Gly  
15 20 25  
Ser Asp Arg Tyr Cys Asn Leu Met Met Gln Arg Arg Lys Met Thr Leu  
30 35 40  
Tyr His Cys Lys Arg Phe Asn Thr Phe Ile His Glu Asp Ile Trp Asn  
45 50 55  
Ile Arg Ser Ile  
60

<210> 4254  
<211> 279  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -24...-1  
<223> score 11.7  
seq FVLGLGLTPPTLA/QD

<400> 4254  
Met Val Met Gly Leu Gly Val Leu Leu Leu Val Phe Val Leu Gly Leu  
-20 -15 -10

004220"666T560

Gly Leu Thr Pro Pro Thr Leu Ala Gln Asp Asn Ser Arg Tyr Thr His  
                   -5                  1                  5  
 Phe Leu Thr Gln His Tyr Asp Ala Lys Pro Gln Gly Arg Asp Asp Arg  
           10                  15                  20  
 Tyr Cys Glu Ser Ile Met Arg Arg Arg Gly Leu Thr Ser Pro Cys Lys  
 25                  30                  35                  40  
 Asp Ile Asn Thr Phe Xaa Ser Trp Gln Gln Ala Gln Ile Lys Ala Ile  
                   45                  50                  55  
 Cys Glu Asn Lys Asn Gly Asn Pro His Arg Glu Asn Leu  
           60                  65

<210> 4255  
 <211> 198  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -24...-1  
 <223> score 11.7  
       seq FVLGLGLTPPTLA/QD

<400> 4255  
 Met Val Met Gly Leu Gly Xaa Leu Leu Leu Val Phe Val Leu Gly Leu  
                   -20                  -15                  -10  
 Gly Leu Thr Pro Pro Thr Leu Ala Gln Asp Asn Ser Arg Tyr Thr His  
                   -5                  1                  5  
 Phe Leu Thr Gln His Tyr Asp Ala Lys Pro Gln Gly Arg Asp Asp Arg  
           10                  15                  20  
 Tyr Cys Glu Ser Ile Met Arg Arg Arg Gly Leu Thr Ser Pro Cys Lys  
 25                  30                  35                  40  
 Asp Ile

<210> 4256  
 <211> 402  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -33...-1  
 <223> score 11.2  
       seq ILCLLAAGLAAG/DR

<400> 4256  
 Met Arg Lys Arg Ala Pro Gln Ser Glu Met Ala Pro Ala Gly Val Ser  
                   -30                  -25                  -20  
 Leu Arg Ala Thr Ile Leu Cys Leu Leu Ala Trp Ala Gly Leu Ala Ala  
                   -15                  -10                  -5  
 Gly Asp Arg Val Tyr Ile His Pro Phe His Leu Val Ile His Asn Glu  
           1                  5                  10                  15  
 Ser Thr Cys Glu Gln Leu Ala Lys Ala Asn Ala Gly Lys Pro Lys Asp

**SECRET**

```
<220>
<221> SIGNAL
<222> -45..-1
<223> score 3.7
      seq EDLLMYLLQLVOA/LK
```

```
<210> 4258
<211> 363
<212> PRT
<213> Homo sapiens
```

2662

<223> score 6.5  
seq WTITLFLLGAAKG/KE

<400> 4258  
Met Leu Ile Phe Trp Thr Ile Thr Leu Phe Leu Leu Gly Ala Ala Lys  
-15 -10 -5  
Gly Lys Glu Val Cys Tyr Glu Asp Leu Gly Cys Phe Ser Asp Thr Glu  
1 5 10 15  
Pro Trp Gly Gly Thr Ala Ile Arg Pro Leu Lys Ile Leu Pro Trp Ser  
20 25 30  
Pro Glu Lys Ile Gly Thr Arg Phe Leu Leu Tyr Thr Asn Glu Asn Pro  
35 40 45  
Asn Asn Phe Gln Ile Leu Leu Leu Ser Asp Pro Ser Thr Ile Glu Ala  
50 55 60  
Ser Asn Phe Gln Met Asp Arg Lys Thr Arg Phe Ile Ile His Gly Phe  
65 70 75  
Ile Asp Lys Gly Asp Glu Ser Trp Val Thr Asp Met Cys Lys Lys Leu  
80 85 90 95  
Phe Glu Val Glu Glu Val Asn Cys Ile  
100

<210> 4259  
<211> 300  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -22..-1  
<223> score 5.8  
seq LGIILLVLIGXQG/TP

<400> 4259  
Met Lys Lys Ser Gly Val Leu Phe Leu Leu Gly Ile Ile Leu Leu Val  
-20 -15 -10  
Leu Ile Gly Xaa Gln Gly Thr Pro Val Val Arg Lys Gly Arg Cys Ser  
-5 1 5 10  
Cys Ile Ser Thr Asn Gln Gly Thr Ile His Leu Gln Ser Leu Lys Asp  
15 20 25  
Leu Lys Gln Phe Ala Pro Ser Pro Ser Cys Glu Lys Ile Glu Ile Ile  
30 35 40  
Ala Thr Leu Lys Asn Gly Val Gln Thr Cys Leu Asn Pro Asp Ser Ala  
45 50 55  
Asp Val Lys Glu Leu Ile Xaa Lys Trp Glu Asn Arg Ser Ala Lys Arg  
60 65 70  
Lys Ser Lys Arg  
75

<210> 4260  
<211> 390  
<212> PRT  
<213> Homo sapiens

004220"666T560

<220>  
 <221> SIGNAL  
 <222> -13...-1  
 <223> score 4.2  
 seq MLSVRVAAAVVRA/LP

<400> 4260  
 Met Leu Ser Val Arg Val Ala Ala Ala Val Val Arg Ala Leu Pro Arg  
                   -10                  -5                  1  
 Arg Ala Gly Leu Val Ser Arg Asn Ala Leu Gly Ser Ser Phe Ile Ala  
   5                                  10                  15  
 Ala Arg Asn Phe His Ala Ser Asn Thr His Leu Gln Lys Thr Gly Thr  
 20                                  25                  30                  35  
 Ala Glu Met Ser Ser Ile Leu Glu Glu Arg Ile Leu Gly Ala Asp Thr  
                                   40                  45                  50  
 Ser Val Asp Leu Glu Glu Thr Gly Arg Val Leu Ser Ile Gly Asp Gly  
                   55                  60                  65  
 Ile Ala Arg Val His Gly Leu Arg Asn Val Gln Ala Glu Glu Met Val  
   70                                  75                  80  
 Glu Phe Ser Ser Gly Leu Lys Gly Met Ser Leu Asn Leu Glu Pro Asp  
   85                                  90                  95  
 Asn Val Gly Val Val Val Phe Gly Asn Asp Lys Leu Ile Lys Glu Gly  
 100                                  105                  110                  115  
 Asp Ile

<210> 4261  
 <211> 168  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -13...-1  
 <223> score 4.2  
 seq MLSVRVAAAVVRA/LP

<400> 4261  
 Met Leu Ser Val Arg Val Ala Ala Ala Val Val Arg Ala Leu Pro Arg  
                   -10                  -5                  1  
 Arg Ala Gly Leu Val Ser Arg Asn Ala Leu Gly Ser Ser Phe Ile Ala  
   5                                  10                  15  
 Ala Arg Asn Phe His Ala Ser Asn Thr His Leu Gln Lys Thr Gly Lys  
 20                                  25                  30                  35  
 Leu Leu Phe Leu Ser Leu Arg Arg  
                                   40

<210> 4262  
 <211> 252  
 <212> PRT  
 <213> Homo sapiens



<220>  
 <221> SIGNAL  
 <222> -23...-1  
 <223> score 3.9  
 seq GWAGSCFWQWSFC/PP

<400> 4262  
 Met Met Ile Tyr Val Ser Thr Gly Ala Trp Gly Trp Ala Gly Ser Cys  
                   -20                  -15                  -10  
 Phe Trp Gln Trp Ser Phe Cys Pro Pro Ala Cys Val Gly Cys Ile Glu  
                   -5                  1                  5  
 Glu Ala Gln Gly Ser Ser Glu Gln Glu Xaa His Tyr Ala Ser Leu Gln  
 10                  15                  20                  25  
 Arg Leu Pro Val Pro Ser Ser Glu Gly Pro Asp Leu Arg Gly Arg Asp  
                   30                  35                  40  
 Lys Arg Gly Thr Lys Glu Asp Pro Arg Ala Asp Tyr Ala Cys Ile Ala  
                   45                  50                  55  
 Glu Asn Lys Pro  
                   60

<210> 4263  
 <211> 288  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -32...-1  
 <223> score 11.3  
 seq LLLAVVLLSACLC/WL

<400> 4263  
 Met Leu Ser Arg Asn Asp Asp Ile Cys Ile Tyr Gly Gly Leu Gly Leu  
                   -30                  -25                  -20  
 Gly Gly Leu Leu Leu Leu Ala Val Val Leu Leu Ser Ala Cys Leu Cys  
                   -15                  -10                  -5  
 Trp Leu His Arg Arg Val Lys Arg Leu Glu Xaa Ser Trp Ala Gln Gly  
 1                  5                  10                  15  
 Ser Ser Glu Gln Glu Leu His Tyr Ala Ser Leu Gln Arg Leu Pro Val  
                   20                  25                  30  
 Pro Ser Ser Glu Gly Pro Asp Leu Arg Gly Arg Asp Lys Arg Gly Thr  
                   35                  40                  45  
 Lys Glu Asp Pro Arg Ala Asp Tyr Ala Cys Ile Ala Glu Asn Lys Pro  
                   50                  55                  60

<210> 4264  
 <211> 435  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL

004220"666E560

<222> -25...-1  
 <223> score 8.9  
 seq IIAVLMSAQESWA/IK

<400> 4264  
 Met Ala Ile Ser Gly Val Pro Val Leu Gly Phe Phe Ile Ile Ala Val  
 -25 -20 -15 -10  
 Leu Met Ser Ala Gln Glu Ser Trp Ala Ile Lys Glu Glu His Val Ile  
 -5 1 5  
 Ile Gln Ala Glu Phe Tyr Leu Asn Pro Asp Gln Ser Gly Glu Phe Met  
 10 15 20  
 Phe Asp Phe Asp Gly Asp Glu Ile Phe His Val Asp Met Ala Lys Lys  
 25 30 35  
 Glu Thr Val Trp Arg Leu Glu Glu Phe Gly Arg Phe Ala Ser Phe Glu  
 40 45 50 55  
 Ala Gln Gly Ala Leu Ala Asn Ile Ala Val Asp Lys Ala Asn Leu Glu  
 60 65 70  
 Ile Met Thr Lys Arg Ser Asn Tyr Thr Pro Ile Thr Asn Val Pro Pro  
 75 80 85  
 Glu Val Thr Val Leu Thr Asn Ser Pro Val Glu Leu Arg Glu Pro Asn  
 90 95 100  
 Val Leu Ile Cys Phe Ile Asp Lys Phe Thr Pro Pro Val Val Asn Val  
 105 110 115  
 Thr  
 120

<210> 4265  
 <211> 390  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -45...-1  
 <223> score 5.8  
 seq ILVAFSFLFTVIT/FP

<400> 4265  
 Met Ala Glu Lys Arg His Thr Arg Asp Ser Glu Ala Gln Arg Leu Pro  
 -45 -40 -35 -30  
 Asp Ser Phe Lys Asp Ser Pro Ser Lys Gly Leu Gly Pro Cys Gly Trp  
 -25 -20 -15  
 Ile Leu Val Ala Phe Ser Phe Leu Phe Thr Val Ile Thr Phe Pro Ile  
 -10 -5 1  
 Ser Ile Trp Met Cys Ile Lys Ile Ile Lys Glu Tyr Glu Arg Ala Ile  
 5 10 15  
 Ile Phe Arg Leu Gly Arg Ile Leu Gln Gly Xaa Ala Lys Gly Pro Gly  
 20 25 30 35  
 Leu Phe Phe Ile Leu Pro Cys Thr Asp Ser Phe Ile Lys Val Asp Met  
 40 45 50  
 Arg Thr Ile Ser Phe Asp Ile Pro Pro Gln Glu Ile Leu Thr Lys Asp  
 55 60 65

Ser Val Thr Ile Ser Val Asp Gly Val Val Tyr Tyr Arg Val Gln Asn  
 70 75 80  
 Ala Pro  
 85

<210> 4266  
 <211> 312  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -15..-1  
 <223> score 4.8  
 seq SLATAAPVPTTLA/QV

<400> 4266  
 Met His Ser Leu Ala Thr Ala Ala Pro Val Pro Thr Thr Leu Ala Gln  
 -15 -10 -5 1  
 Val Asp Arg Glu Lys Ile Tyr Gln Trp Ile Asn Glu Leu Ser Ser Pro  
 5 10 15  
 Glu Thr Arg Glu Asn Ala Leu Leu Glu Leu Ser Lys Lys Arg Glu Ser  
 20 25 30  
 Val Pro Asp Leu Ala Pro Met Leu Trp His Ser Phe Gly Thr Ile Ala  
 35 40 45  
 Ala Leu Leu Gln Glu Ile Val Asn Ile Tyr Xaa Ser Ile Asn Pro Pro  
 50 55 60 65  
 Thr Leu Thr Ala His Gln Ser Asn Arg Val Cys Asn Ala Leu Ala Leu  
 70 75 80  
 Leu Gln Cys Val Ala Ser His Pro  
 85

<210> 4267  
 <211> 258  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -20..-1  
 <223> score 8.5  
 seq WIGLISSVCCVFA/QT

<400> 4267  
 Met Asn Leu Gln Pro Ile Phe Trp Ile Gly Leu Ile Ser Ser Val Cys  
 -20 -15 -10 -5  
 Cys Val Phe Ala Gln Thr Asp Xaa Asn Arg Cys Leu Lys Ala Asn Ala  
 1 5 10  
 Lys Ser Cys Gly Glu Cys Ile Gln Ala Gly Pro Asn Cys Gly Trp Cys  
 15 20 25  
 Thr Asn Ser Thr Phe Leu Gln Glu Gly Met Pro Thr Ser Ala Arg Cys  
 30 35 40

Asp Asp Leu Glu Ala Leu Lys Lys Lys Gly Cys Pro Pro Asp Asp Ile  
 45 50 55 60  
 Glu Asn Pro Arg Gly Ser  
 65

<210> 4268  
 <211> 207  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -20..-1  
 <223> score 11.3  
 seq LLLLLVLWGPVCP/LH

<400> 4268  
 Met Val Leu Cys Phe Pro Leu Leu Leu Leu Leu Val Leu Trp Gly  
 -20 -15 -10 -5  
 Pro Val Cys Pro Leu His Ala Trp Pro Lys Arg Leu Thr Lys Ala His  
 1 5 10  
 Trp Phe Glu Ile Gln His Ile Gln Pro Ser Pro Leu Gln Cys Asn Arg  
 15 20 25  
 Ala Met Ser Gly Ile Asn Asn Tyr Thr Gln His Cys Lys His Gln Asn  
 30 35 40  
 Thr Phe Leu His Asp  
 45

<210> 4269  
 <211> 210  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -18..-1  
 <223> score 7  
 seq VLGLVLLSVTVQG/KV

<400> 4269  
 Met Lys Ala Leu Ile Val Leu Gly Leu Val Leu Leu Ser Val Thr Val  
 -15 -10 -5  
 Gln Gly Lys Val Phe Glu Arg Cys Glu Leu Ala Arg Thr Leu Lys Arg  
 1 5 10  
 Leu Gly Met Asp Gly Tyr Arg Gly Ile Ser Leu Ala Asn Cys Lys Ser  
 15 20 25 30  
 Thr Leu His Asn Ser Arg Glu Leu Ala Thr Tyr Gly Thr Asp Thr Arg  
 35 40 45  
 Arg Glu Gly Arg Arg Arg  
 50

<210> 4270

<211> 375  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SIGNAL  
 <222> -44...-1  
 <223> score 5.8  
       seq MVFLLGLMFEITA/KA

<400> 4270  
 Met Ala Ile Arg Lys Lys Ser Thr Lys Ser Pro Pro Val Leu Ser His  
                   -40                  -35                  -30  
 Glu Phe Val Leu Gln Asn His Ala Asp Ile Val Ser Cys Val Ala Met  
                   -25                  -20                  -15  
 Val Phe Leu Leu Gly Leu Met Phe Glu Ile Thr Ala Lys Ala Ser Ile  
                   -10                  -5                  1  
 Ile Phe Val Thr Leu Gln Tyr Asn Val Thr Leu Pro Ala Thr Glu Glu  
 5                  10                  15                  20  
 Gln Ala Thr Glu Ser Val Ser Leu Tyr Tyr Tyr Gly Ile Lys Asp Leu  
                   25                  30                  35  
 Ala Thr Val Phe Phe Tyr Met Leu Val Ala Ile Ile Ile His Ala Val  
                   40                  45                  50  
 Ile Gln Glu Tyr Met Leu Asp Lys Ile Asn Arg Arg Met Xaa Phe Ser  
                   55                  60                  65  
 Lys Thr Xaa His Ser Lys Phe Asn Glu Ser Gly Gln Leu  
                   70                  75                  80

<210> 4271  
 <211> 342  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -28...-1  
 <223> score 6.1  
       seq AVGFLSSLRTRG/CV

<400> 4271  
 Met Ser His Gly Lys Gly Thr Asp Met Leu Pro Glu Ile Ala Ala Ala  
                   -25                  -20                  -15  
 Val Gly Phe Leu Ser Ser Leu Leu Arg Thr Arg Gly Cys Val Ser Glu  
                   -10                  -5                  1  
 Gln Arg Leu Lys Val Phe Ser Gly Ala Leu Gln Glu Ala Leu Thr Glu  
 5                  10                  15                  20  
 His Tyr Lys His His Trp Phe Pro Glu Lys Pro Ser Lys Gly Ser Gly  
                   25                  30                  35  
 Tyr Arg Cys Ile Arg Ile Asn His Lys Met Asp Pro Ile Ile Ser Arg  
                   40                  45                  50  
 Val Ala Ser Gln Ile Gly Leu Ser Gln Pro Gln Leu His Gln Leu Leu  
                   55                  60                  65

Pro Ser Glu Leu Thr Leu Trp Val Asp Pro Met Arg Cys Pro Thr His  
 70 75 80

Trp Glu  
 85

<210> 4272  
 <211> 258  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -22..-1  
 <223> score 10  
 seq FLLALTIIASTWA/LT

<400> 4272  
 Met Ala Pro Pro Gly Ser Ser Thr Val Phe Leu Leu Ala Leu Thr Ile  
 -20 -15 -10  
 Ile Ala Ser Thr Trp Ala Leu Thr Pro Thr His Tyr Leu Thr Lys His  
 -5 1 5 10  
 Asp Val Xaa Arg Leu Lys Ala Ser Leu Asp Arg Pro Phe Thr Asn Leu  
 15 20 25  
 Glu Ser Ala Phe Tyr Ser Ile Val Gly Leu Ser Ser Leu Gly Ala Gln  
 30 35 40  
 Val Pro Asp Ala Lys Val Arg Leu Leu Ser Trp Trp Ser Gly Trp  
 45 50 55  
 Phe Arg Arg Thr Phe Ile  
 60

<210> 4273  
 <211> 282  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -38..-1  
 <223> score 4.5  
 seq IIAVIALXAVGLT/QN

<400> 4273  
 Met Glu Asp Thr Lys Glu Ser Asn Val Lys Thr Phe Xaa Ser Xaa Asn  
 -35 -30 -25  
 Ile Xaa Ala Ile Leu Gly Xaa Xaa Xaa Ile Ile Ala Val Ile Ala Leu  
 -20 -15 -10  
 Xaa Ala Val Gly Leu Thr Gln Asn Lys Ala Leu Pro Glu Asn Val Lys  
 -5 1 5 10  
 Tyr Gly Ile Val Leu Asp Ala Gly Ser Ser His Thr Ser Leu Tyr Ile  
 15 20 25  
 Tyr Lys Trp Pro Ala Xaa Lys Glu Asn Asp Thr Gly Val Xaa His Gln  
 30 35 40

Val Glu Glu Cys Arg Val Lys Gly Pro Gly Ile Ser Lys Phe  
 45 50 55

<210> 4274  
 <211> 210  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -26...-1  
 <223> score 5.2  
 seq LIFLPVLLSYIGP/SI

<400> 4274  
 Met Tyr Leu Ala Met Val Leu Leu Gly Ala Thr His Gly Leu Ile Phe  
 -25 -20 -15  
 Leu Pro Val Leu Leu Ser Tyr Ile Gly Pro Ser Ile Pro Glu His Ala  
 -10 -5 1 5  
 Xaa Pro Ser Gly Ser Thr Val Gly Lys Thr His Gly Cys Ile Lys Pro  
 10 15 20  
 Pro Gly Leu Thr Ala Gln Gln Glu Thr Lys Gly Glu Ser Leu Thr Ser  
 25 30 35  
 Glu Asn Ala Leu Gln Pro  
 40

<210> 4275  
 <211> 315  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -42...-1  
 <223> score 5.8  
 seq FSPICLSTSLSLA/QV

<400> 4275  
 Met Asp Ala Leu Gln Leu Ala Asn Ser Ala Phe Ala Val Asp Leu Phe  
 -40 -35 -30  
 Lys Gln Leu Cys Glu Lys Glu Pro Leu Gly Asn Val Leu Phe Ser Pro  
 -25 -20 -15  
 Ile Cys Leu Ser Thr Ser Leu Ser Leu Ala Gln Val Gly Ala Lys Gly  
 -10 -5 1 5  
 Asp Thr Ala Asn Glu Ile Gly Gln Val Leu His Phe Glu Asn Val Lys  
 10 15 20  
 Asp Val Pro Phe Gly Phe Gln Thr Val Thr Ser Asp Val Asn Lys Leu  
 25 30 35  
 Ser Ser Phe Tyr Ser Leu Xaa Leu Ile Lys Arg Leu Tyr Val Asp Lys  
 40 45 50  
 Ser Leu Asn Leu Ser Thr Glu Phe Ile  
 55 60

<210> 4276  
 <211> 360  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -23...-1  
 <223> score 9.6  
 seq LLLALLHPTIILA/QQ

<400> 4276  
 Met Met Ser Phe Val Gln Lys Gly Ser Trp Leu Leu Leu Ala Leu Leu  
                   -20                  -15                  -10  
 His Pro Thr Ile Ile Leu Ala Gln Gln Glu Ala Val Glu Gly Gly Cys  
                   -5                  1                  5  
 Ser His Leu Gly Gln Ser Tyr Ala Asp Arg Asp Val Trp Lys Pro Glu  
 10                  15                  20                  25  
 Pro Cys Gln Ile Cys Val Cys Asp Ser Gly Ser Val Leu Cys Asp Asp  
                   30                  35                  40  
 Ile Ile Cys Asp Asp Gln Glu Leu Asp Cys Pro Asn Pro Glu Ile Pro  
                   45                  50                  55  
 Phe Gly Glu Cys Cys Ala Val Cys Pro Gln Pro Pro Thr Ala Pro Thr  
                   60                  65                  70  
 Arg Pro Pro Asn Gly Gln Gly Pro Gln Gly Pro Lys Gly Asp Pro Gly  
                   75                  80                  85  
 Pro Pro Gly Ile Pro Gly Arg Asn  
 90                  95

<210> 4277  
 <211> 291  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -21...-1  
 <223> score 3.9  
 seq VVALLVNLTRLDS/SM

<400> 4277  
 Met Gly Ser Gly Trp Val Pro Trp Val Val Ala Leu Leu Val Asn Leu  
                   -20                  -15                  -10  
 Thr Arg Leu Asp Ser Ser Met Thr Gln Gly Thr Asp Ser Pro Glu Asp  
                   -5                  1                  5                  10  
 Phe Val Ile Gln Ala Lys Ala Asp Cys Tyr Phe Thr Asn Gly Thr Glu  
                   15                  20                  25  
 Lys Val Gln Phe Val Val Arg Phe Ile Phe Asn Leu Glu Glu Tyr Val  
                   30                  35                  40  
 Arg Phe Asp Ser Xaa Val Gly Met Phe Val Ala Leu Thr Lys Leu Gly  
                   45                  50                  55

004220"666E7560



Gln Pro Asp Ala Glu Gln Trp Asn Ser Arg Leu Asp Leu Leu Glu Arg  
60 65 70 75  
Ser

<210> 4278  
<211> 390  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -27...-1  
<223> score 11.6  
seq ILLSTLTGRSYG/QP

<400> 4278  
Met Arg Lys Ser Pro Gly Leu Ser Asp Cys Leu Trp Ala Trp Ile Leu  
-25 -20 -15  
Leu Leu Ser Thr Leu Thr Gly Arg Ser Tyr Gly Gln Pro Ser Leu Gln  
-10 -5 1 5  
Asp Glu Leu Lys Asp Asn Thr Thr Val Phe Thr Arg Ile Leu Asp Arg  
10 15 20  
Leu Leu Asp Gly Tyr Asp Asn Arg Leu Arg Pro Gly Leu Gly Glu Arg  
25 30 35  
Val Thr Glu Val Lys Thr Asp Ile Phe Val Thr Ser Phe Gly Pro Val  
40 45 50  
Ser Asp His Asp Met Glu Tyr Thr Ile Asp Val Phe Phe Arg Gln Ser  
55 60 65  
Trp Lys Asp Glu Arg Leu Lys Phe Lys Gly Pro Met Thr Val Leu Arg  
70 75 80 85  
Leu Asn Asn Leu Met Ala Ser Lys Ile Trp Thr Pro Asp Thr Phe Phe  
90 95 100  
His Asn

<210> 4279  
<211> 294  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -18...-1  
<223> score 16.3  
seq LLLAGLFSLQA/QY

<400> 4279  
Met Gln Trp Thr Ser Leu Leu Leu Leu Ala Gly Leu Phe Ser Leu Ser  
-15 -10 -5  
Gln Ala Gln Tyr Glu Asp Asp Pro His Trp Trp Phe His Tyr Leu Arg  
1 5 10  
Ser Gln Gln Ser Thr Tyr Tyr Asp Pro Tyr Asp Pro Tyr Pro Tyr Glu  
15 20 25 30

Thr Tyr Glu Pro Tyr Pro Tyr Gly Val Asp Glu Gly Pro Ala Tyr Thr  
                           35                          40                          45  
 Tyr Gly Ser Pro Ser Pro Pro Asp Pro Arg Asp Cys Pro Gln Glu Cys  
                           50                          55                          60  
 Asp Cys Pro Pro Asn Phe Pro Thr Ala Met Tyr Cys Asp Asn Arg Asn  
                           65                          70                          75  
 Leu Lys  
           80

<210> 4280  
 <211> 294  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -20...-1  
 <223> score 10.7  
       seq LTL L L L L L L LAGDRA/SS

<400> 4280  
 Met Ala Ser Arg Leu Thr Leu Leu Thr Leu Leu Leu Leu Leu Ala  
 -20                          -15                          -10                          -5  
 Gly Asp Arg Ala Ser Ser Asn Pro Asn Ala Thr Ser Ser Ser Ser Gln  
                           1                          5                          10  
 Asp Pro Glu Ser Leu Gln Asp Arg Gly Glu Gly Lys Val Ala Thr Thr  
                           15                          20                          25  
 Val Ile Ser Lys Met Leu Phe Val Glu Pro Ile Leu Glu Val Ser Ser  
                           30                          35                          40  
 Leu Pro Thr Thr Asn Ser Thr Thr Asn Ser Ala Thr Lys Ile Thr Ala  
 45                          50                          55                          60  
 Asn Thr Thr Asp Glu Pro Thr Thr Gln Pro Thr Thr Glu Pro Thr Thr  
                           65                          70                          75  
 Xaa His

<210> 4281  
 <211> 303  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -20...-1  
 <223> score 10.7  
       seq LTL L L L L L L LAGDRA/SS

<400> 4281  
 Met Ala Ser Arg Leu Thr Leu Leu Thr Leu Leu Leu Leu Leu Ala  
 -20                          -15                          -10                          -5  
 Gly Asp Arg Ala Ser Ser Asn Pro Asn Ala Thr Ser Ser Ser Ser Gln  
                           1                          5                          10  
 Asp Pro Glu Ser Leu Gln Asp Arg Gly Glu Gly Lys Val Ala Thr Thr

15                      20                      25  
 Val Ile Ser Lys Met Leu Phe Val Glu Pro Ile Leu Glu Val Ser Ser  
 30                      35                      40  
 Leu Pro Thr Thr Asn Ser Thr Thr Asn Ser Ala Thr Lys Ile Thr Ala  
 45                      50                      55                      60  
 Asn Thr Thr Asp Glu Pro Thr Thr Gln Pro Thr Thr Glu Pro Xaa Thr  
 65                      70                      75  
 Gln Pro Thr Ile Gln  
 80

<210> 4282  
 <211> 177  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -34...-1  
 <223> score 4  
 seq IAVLYLHLYDVFG/DP

<400> 4282  
 Met Glu Arg Gly Leu Lys Ser Ala Asp Pro Arg Asp Gly Thr Gly Tyr  
 -30                      -25                      -20  
 Thr Gly Trp Ala Gly Ile Ala Val Leu Tyr Leu His Leu Tyr Asp Val  
 -15                      -10                      -5  
 Phe Gly Asp Pro Ala Tyr Leu Gln Leu Ala His Gly Tyr Val Lys Gln  
 1                      5                      10  
 Ser Leu Asn Cys Leu Thr Lys Arg Ser Ile Thr  
 15                      20                      25

<210> 4283  
 <211> 357  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -42...-1  
 <223> score 7.4  
 seq SLSVLVLLLTIIA/VT

<400> 4283  
 Met Gly Lys Ser Glu Ser Gln Met Asp Ile Thr Asp Ile Xaa Thr Pro  
 -40                      -35                      -30  
 Lys Pro Lys Lys Lys Gln Arg Xaa Thr Pro Leu Glu Ile Ser Leu Ser  
 -25                      -20                      -15  
 Val Leu Val Leu Leu Leu Thr Ile Ile Ala Val Thr Met Ile Ala Leu  
 -10                      -5                      1                      5  
 Tyr Ala Thr Tyr Asp Asp Gly Ile Cys Lys Ser Ser Asp Cys Ile Lys  
 10                      15                      20  
 Ser Ala Ala Arg Leu Ile Gln Asn Met Asp Ala Xaa Thr Glu Pro Cys

004220"666E7560

25                      30                      35  
 Thr Asp Phe Phe Lys Tyr Ala Cys Gly Gly Trp Leu Lys Arg Asn Val  
 40                      45                      50  
 Ile Pro Glu Thr Ser Ser Arg Tyr Gly Thr Phe Gly Ile Leu Arg Asp  
 55                      60                      65                      70  
 Glu Leu Glu Val Val Leu Lys  
 75

<210> 4284  
 <211> 357  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -42..-1  
 <223> score 7.4  
 seq SLSVLVLLLTIIA/VT

<400> 4284  
 Met Gly Xaa Ser Glu Ser Gln Met Asp Ile Thr Asp Ile Asn Thr Pro  
 -40                      -35                      -30  
 Lys Pro Lys Lys Lys Gln Arg Trp Thr Pro Leu Glu Ile Ser Leu Ser  
 -25                      -20                      -15  
 Val Leu Val Leu Leu Leu Thr Ile Ile Ala Val Thr Met Ile Ala Leu  
 -10                      -5                      1                      5  
 Tyr Ala Thr Tyr Asp Asp Gly Ile Cys Lys Ser Ser Asp Cys Ile Lys  
 10                      15                      20  
 Ser Ala Ala Arg Leu Ile Xaa Xaa Met Asp Ala Thr Thr Glu Pro Cys  
 25                      30                      35  
 Thr Asp Phe Phe Lys Tyr Ala Cys Gly Gly Trp Leu Lys Arg Asn Val  
 40                      45                      50  
 Ile Pro Glu Thr Ser Ser Arg Tyr Gly Thr Phe Gly Ile Leu Arg Asp  
 55                      60                      65                      70  
 Glu Leu Glu Val Val Leu Lys  
 75

<210> 4285  
 <211> 297  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -24..-1  
 <223> score 4.6  
 seq QGMLLAILEXCGA/IP

<400> 4285  
 Met Val Lys Ser Val Ile Phe Leu Ser Phe Trp Gln Gly Met Leu Leu  
 -20                      -15                      -10  
 Ala Ile Leu Glu Xaa Cys Gly Ala Ile Pro Lys Ile His Ser Ala Arg



&lt;400&gt; 4287

```

Met Arg Val Xaa Ala Pro Arg Thr Xaa Leu Leu Leu Leu Ser Gly Ala
      -20                      -15                      -10
Leu Ala Leu Thr Glu Thr Trp Ala Gly Ser His Ser Met Arg Tyr Phe
      -5                      1                      5                      10
Tyr Thr Xaa Xaa Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Xaa
                      15                      20                      25
Val Gly Tyr Val Asp Asp Thr Xaa Phe Val Arg Phe Asp Ser Asp Ala
                      30                      35                      40
Xaa Ser Pro Arg Xaa Xaa Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly
      45                      50                      55
Pro Glu Tyr Trp Asp Arg Xaa Thr Gln Ile Ser Lys Thr Asn Thr Gln
      60                      65                      70
Thr Tyr Arg Glu Asn Leu Arg Thr Ala Leu Arg Tyr Tyr Asn Gln Ser
      75                      80                      85                      90
Glu Ala Gly Ser His Ile Ile Gln Arg Met Tyr Gly
                      95                      100

```

&lt;210&gt; 4288

&lt;211&gt; 297

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SIGNAL

&lt;222&gt; -24...-1

&lt;223&gt; score 9.4

seq LLSGALALTETWA/XS

&lt;400&gt; 4288

```

Met Arg Val Xaa Ala Pro Arg Thr Xaa Leu Leu Leu Leu Ser Gly Ala
      -20                      -15                      -10
Leu Ala Leu Thr Glu Thr Trp Ala Xaa Ser His Ser Met Arg Tyr Phe
      -5                      1                      5
Tyr Thr Ala Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Xaa
      10                      15                      20
Val Gly Tyr Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala
      25                      30                      35                      40
Ala Ser Pro Arg Xaa Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly
      45                      50                      55
Pro Glu Tyr Trp Asp Arg Asn Thr Gln Ile Xaa Lys Thr Asn Thr Leu
      60                      65                      70
Arg Arg Arg
      75

```

&lt;210&gt; 4289

&lt;211&gt; 468

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

<221> SIGNAL  
 <222> -22...-1  
 <223> score 9.9  
 seq XLLLSGALALTQT/WA

<400> 4289  
 Met Ala Val Met Ala Pro Arg Thr Leu Xaa Leu Leu Leu Ser Gly Ala  
           -20                  -15                  -10  
 Leu Ala Leu Thr Gln Thr Trp Ala Gly Ser His Ser Met Arg Tyr Phe  
       -5                  1                  5                  10  
 Xaa Thr Ser Val Ser Xaa Pro Gly Arg Gly Glu Pro Arg Phe Ile Ala  
                   15                  20                  25  
 Val Gly Tyr Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala  
                   30                  35                  40  
 Ala Ser Gln Arg Met Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly  
                   45                  50                  55  
 Pro Glu Tyr Trp Asp Gly Glu Thr Arg Lys Val Lys Ala His Ser Gln  
       60                  65                  70  
 Thr His Arg Val Asp Leu Gly Thr Leu Arg Gly Tyr Tyr Asn Gln Ser  
       75                  80                  85                  90  
 Glu Ala Gly Ser His Thr Val Gln Arg Met Tyr Gly Cys Asp Val Gly  
                   95                  100                  105  
 Ser Asp Trp Arg Phe Leu Arg Gly Tyr His Gln Tyr Ala Tyr Asp Gly  
                   110                  115                  120  
 Lys Asp Tyr Ile Ala Leu Lys Glu Asp Leu Arg Ser  
           125                  130

<210> 4290  
 <211> 360  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -17...-1  
 <223> score 9.3  
 seq SLLLLLSGALALT/DT

<400> 4290  
 Met Ala Pro Arg Ser Leu Leu Leu Leu Leu Ser Gly Ala Leu Ala Leu  
           -15                  -10                  -5  
 Thr Asp Thr Trp Ala Gly Ser His Ser Leu Arg Tyr Phe Ser Thr Ala  
       1                  5                  10                  15  
 Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Tyr Ile Ala Val Glu Tyr  
                   20                  25                  30  
 Val Asp Asp Thr Gln Phe Leu Arg Phe Asp Ser Asp Ala Ala Ile Pro  
                   35                  40                  45  
 Arg Met Glu Pro Arg Glu Pro Trp Val Glu Gln Glu Gly Pro Gln Tyr  
                   50                  55                  60  
 Trp Glu Trp Thr Thr Gly Tyr Ala Lys Ala Asn Ala Gln Thr Asp Arg  
       65                  70                  75  
 Val Ala Leu Arg Asn Leu Leu Arg Arg Tyr Asn Gln Ser Glu Ala Gly

004220" 6667560

80                      85                      90                      95  
 Ser His Thr Leu Gln Gly Met Asn  
                          100

<210> 4291  
 <211> 411  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -17..-1  
 <223> score 8.4  
       seq TLLLLLSEALALT/QT

<400> 4291  
 Met Val Asp Gly Thr Leu Leu Leu Leu Leu Ser Glu Ala Leu Ala Leu  
           -15                                      -10                                      -5  
 Thr Gln Thr Trp Ala Gly Ser His Ser Leu Lys Tyr Phe His Thr Ser  
    1                                      5                                      10                                      15  
 Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ser Val Gly Tyr  
    20                                      25                                      30  
 Val Asp Asp Thr Gln Phe Val Arg Phe Asp Asn Asp Ala Ala Ser Pro  
    35                                      40                                      45  
 Arg Met Val Pro Arg Ala Pro Trp Met Glu Gln Glu Gly Ser Glu Tyr  
    50                                      55                                      60  
 Trp Asp Arg Glu Thr Arg Ser Ala Arg Asp Thr Ala Gln Ile Phe Arg  
    65                                      70                                      75  
 Val Asn Leu Arg Thr Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala Gly  
 80                                      85                                      90                                      95  
 Ser His Thr Leu Gln Trp Met His Gly Cys Glu Leu Gly Pro Glu Gly  
    100                                      105                                      110  
 Ala Ser Ser Ala Gly Met Thr Val Arg  
    115                                      120

<210> 4292  
 <211> 201  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -21..-1  
 <223> score 10.5  
       seq VLGLCLLSVGWVG/QD

<400> 4292  
 Met Gln Ser Gly Thr His Trp Arg Val Leu Gly Leu Cys Leu Leu Ser  
       -20                                      -15                                      -10  
 Val Gly Val Trp Gly Gln Asp Gly Asn Glu Glu Met Gly Gly Ile Thr  
       -5                                      1                                      5                                      10  
 Gln Thr Pro Tyr Lys Val Ser Ile Ser Gly Thr Thr Val Ile Leu Thr

004220"66661560



15                      20                      25  
 Cys Pro Gln Tyr Pro Gly Ser Glu Ile Leu Trp Gln His Asn Asp Lys  
          30                      35                      40  
 Asn Ile Gly  
          45

<210> 4293  
 <211> 312  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -20..-1  
 <223> score 7.4  
       seq FGMVFSLLQVVS/ES

<400> 4293  
 Met Thr Ile Leu Gly Thr Thr Phe Gly Met Val Phe Ser Leu Leu Gln  
 -20                      -15                      -10                      -5  
 Val Val Ser Gly Glu Ser Gly Tyr Ala Gln Asn Gly Asp Leu Glu Asp  
                          1                      5                      10  
 Ala Glu Leu Asp Asp Tyr Ser Phe Ser Cys Tyr Ser Gln Leu Glu Val  
          15                      20                      25  
 Asn Gly Ser Gln His Ser Leu Thr Cys Ala Phe Glu Asp Pro Asp Val  
          30                      35                      40  
 Asn Xaa Thr Asn Leu Glu Phe Glu Ile Cys Gly Ala Leu Val Glu Val  
 45                      50                      55                      60  
 Lys Cys Leu Asn Phe Arg Lys Leu Gln Glu Ile Tyr Phe Ile Glu Thr  
                          65                      70                      75  
 Lys Lys Phe Leu Leu Ile Gly Lys  
                          80

<210> 4294  
 <211> 447  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -24..-1  
 <223> score 3.8  
       seq LLRLLQSGRRVHS/VA

<400> 4294  
 Met Ala Met Gly Leu Met Cys Gly Arg Arg Glu Leu Leu Arg Leu Leu  
                          -20                      -15                      -10  
 Gln Ser Gly Arg Arg Val His Ser Val Ala Gly Pro Ser Gln Trp Leu  
          -5                      1                      5  
 Gly Lys Pro Leu Thr Thr Arg Leu Leu Phe Pro Val Ala Pro Cys Cys  
          10                      15                      20  
 Cys Arg Pro His Tyr Leu Phe Leu Ala Ala Ser Gly Pro Arg Ser Leu

25		30		35		40									
Ser	Thr	Ser	Ala	Ile	Ser	Xaa	Ala	Glu	Val	Gln	Val	Gln	Ala	Pro	Pro
			45					50					55		
Val	Val	Ala	Ala	Thr	Pro	Ser	Pro	Thr	Ala	Val	Pro	Glu	Val	Ala	Ser
		60						65					70		
Gly	Glu	Thr	Ala	Asp	Val	Val	Gln	Thr	Ala	Ala	Glu	Gln	Ser	Phe	Ala
		75					80					85			
Glu	Leu	Gly	Leu	Gly	Ser	Tyr	Thr	Pro	Val	Gly	Leu	Ile	Gln	Asn	Leu
	90					95					100				
Leu	Glu	Phe	Met	His	Val	Asp	Leu	Gly	Leu	Pro	Trp	Trp	Gly	Ala	Ile
105					110					115					120
Ala	Ala	Cys	Thr	Val											
				125											

<210> 4295  
 <211> 225  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -45..-1  
 <223> score 6.5  
 seq LLLLVLHPSRXSA/VS

<400> 4295
Met Leu Gly Cys Ser Phe Lys Leu Arg Thr Thr His His Ala Tyr Pro
-45 -40 -35 -30
Gly Ala Glu Gly Pro Asp His His Ser Xaa Lys Asn Arg Gly Gly Cys
-25 -20 -15
Leu Leu Leu Leu Val Leu His Pro Ser Arg Xaa Ser Ala Val Ser Cys
-10 -5 1
Leu Gly Val Ala Ala Ala Met Ala Arg Lys Val Leu Pro Pro Thr His
5 10 15
Leu Gly Gln Ser Trp Phe Cys Ser Cys Cys Arg
20 25 30

<210> 4296  
 <211> 177  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -17..-1  
 <223> score 8.9  
 seq ILIIGILLPQSLA/HP

<400> 4296
Met Ile Trp Tyr Ile Leu Ile Ile Gly Ile Leu Leu Pro Gln Ser Leu
-15 -10 -5
Ala His Pro Gly Phe Phe Thr Ser Ile Gly Gln Met Thr Asp Leu Ile



<222> -32...-1  
 <223> score 8.1  
 seq FLLFFWLDRSVLA/KE

<400> 4298  
 Met Arg Ala Ala Pro Leu Leu Leu Ala Arg Ala Ala Ser Leu Ser Leu  
           -30                          -25                          -20  
 Gly Phe Leu Phe Leu Leu Phe Phe Trp Leu Asp Arg Ser Val Leu Ala  
           -15                          -10                          -5  
 Lys Glu Leu Lys Phe Val Thr Leu Leu Gly Met Glu Gln His Tyr Glu  
 1                          5                          10                          15  
 Leu Gly Glu Tyr Ile Arg Lys Arg Tyr Arg Lys Phe Leu Asn Glu Ser  
           20                          25                          30  
 Tyr Lys His Xaa Gln Val Tyr Ile Arg Ser Thr Asp Val Asp Arg Thr  
           35                          40                          45  
 Leu Met Ser Ala Met Thr Asn Leu Ala Ala Leu Phe Pro Pro Glu Gly  
           50                          55                          60  
 Val Ser Ile Trp Asn Pro Ile Leu Leu Trp Gln Pro Ile Pro Val His  
 65                          70                          75                          80  
 Thr Val Pro Leu Ser Glu Asp Gln Leu Leu Tyr Leu Pro Phe Arg Asn  
                           85                          90                          95  
 Cys Pro Arg Phe Gln Glu Leu Glu Ser Glu Thr Leu Lys Ser Glu Glu  
           100                          105                          110  
 Phe Gln Lys Arg Leu His Pro Tyr Lys Asp Phe Ile Ala Thr Leu Gly  
           115                          120                          125  
 Lys Leu Ser Gly Leu His Gly Gln Asp Leu Phe Gly Ile Trp Ser Lys  
           130                          135                          140  
 Val Tyr  
 145

<210> 4299  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -20...-1  
 <223> score 11.3  
 seq VLLLWGILGAIQA/QQ

<400> 4299  
 Met Leu Gln Gly Thr Cys Ser Val Leu Leu Leu Trp Gly Ile Leu Gly  
           -20                          -15                          -10                          -5  
 Ala Ile Gln Ala Gln Gln Gln Glu Val Ile Ser Pro Asp Thr Thr Glu  
                           1                          5                          10  
 Arg Asn Asn Asn Cys Pro Glu Lys Thr Asp Cys Pro Ile His Val Tyr  
           15                          20                          25  
 Phe Val Leu Asp Thr  
           30

<210> 4300

004220"666E7960

<211> 318  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -13...-1  
 <223> score 6.4  
 seq MWGDLWLLPXASA/NP

<400> 4300  
 Met Trp Gly Asp Leu Trp Leu Leu Pro Xaa Ala Ser Ala Asn Pro Gly  
                   -10                  -5                  1  
 Thr Gly Thr Glu Ala Glu Phe Glu Lys Ala Ala Glu Glu Val Arg His  
   5                                  10                  15  
 Leu Xaa Thr Lys Pro Ser Asp Glu Glu Met Leu Phe Ile Tyr Gly His  
 20                                  25                  30                  35  
 Tyr Lys Gln Ala Thr Val Gly Asp Ile Xaa Xaa Glu Arg Pro Gly Xaa  
                                   40                  45                  50  
 Leu Asp Phe Thr Gly Lys Ala Lys Trp Asp Ala Trp Asn Glu Leu Lys  
                   55                                  60                  65  
 Gly Thr Ser Lys Glu Asp Ala Asn Glu Ser Leu His Gln Gln Ser Arg  
                   70                                  75                  80  
 Arg Ala Lys Glu Lys Ile Arg Asp Asn Glu  
   85                                  90

<210> 4301  
 <211> 267  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -20...-1  
 <223> score 11.6  
 seq ILGLLTAVPPASC/QQ

<400> 4301  
 Met Ser Ala Leu Ser Leu Leu Ile Leu Gly Leu Leu Thr Ala Val Pro  
 -20                                  -15                  -10                  -5  
 Pro Ala Ser Cys Gln Gln Gly Leu Gly Asn Leu Gln Pro Trp Met Gln  
                   1                                  5                  10  
 Gly Leu Ile Ala Val Ala Val Phe Leu Val Leu Val Ala Ile Ala Phe  
   15                                  20                  25  
 Ala Val Xaa His Phe Trp Cys Gln Glu Glu Pro Glu Pro Ala His Met  
   30                                  35                  40  
 Ile Leu Thr Val Gly Asn Lys Ala Asp Gly Val Leu Val Gly Asn Arg  
 45                                  50                  55                  60  
 Trp Lys Gly Thr Leu Arg Trp Arg Ala  
                                   65

<210> 4302

0041220" 666E7560

<211> 291  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -17..-1  
 <223> score 5.7  
 seq LLYYALCFSLSKA/SA

<400> 4302  
 Met Arg Trp Leu Leu Leu Tyr Tyr Ala Leu Cys Phe Ser Leu Ser Lys  
           -15                  -10                  -5  
 Ala Ser Ala His Thr Val Glu Leu Asn Asn Met Phe Gly Gln Ile Gln  
       1                  5                  10                  15  
 Ser Pro Gly Tyr Pro Asp Ser Tyr Pro Ser Asp Ser Glu Val Thr Trp  
                   20                  25                  30  
 Asn Ile Thr Val Pro Asp Gly Phe Arg Ile Lys Leu Tyr Phe Met His  
           35                  40                  45  
 Phe Asn Leu Glu Ser Ser Tyr Leu Cys Glu Tyr Asp Tyr Val Lys Val  
       50                  55                  60  
 Arg Leu Leu Met Ser Leu Thr Gly Pro Gly Ser Leu Leu Gly Phe Arg  
       65                  70                  75  
 Gln  
 80

<210> 4303  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -21..-1  
 <223> score 8.9  
 seq VLLFSGFWGLAMG/AF

<400> 4303  
 Met Arg Ile Ile Ser Arg Gln Ile Val Leu Leu Phe Ser Gly Phe Trp  
       -20                  -15                  -10  
 Gly Leu Ala Met Gly Ala Phe Pro Ser Ser Val Gln Ile Gly Gly Leu  
       -5                  1                  5                  10  
 Phe Ile Arg Asn Thr Asp Gln Glu Tyr Thr Ala Phe Arg Leu Ala Ile  
           15                  20                  25  
 Phe Leu His Asn Thr  
       30

<210> 4304  
 <211> 387  
 <212> PRT  
 <213> Homo sapiens

004220" 666ET560

<220>  
 <221> SIGNAL  
 <222> -48...-1  
 <223> score 4.7  
 seq LFTLSHITQLVLS/HN

<400> 4304  
 Met Ser Lys Ser Leu Lys Lys Leu Val Glu Glu Ser Arg Glu Lys Asn  
                   -45                                  -40                                  -35  
 Gln Pro Glu Val Asp Met Ser Asp Arg Gly Ile Ser Asn Met Leu Asp  
                   -30                                  -25                                  -20  
 Val Asn Gly Leu Phe Thr Leu Ser His Ile Thr Gln Leu Val Leu Ser  
                   -15                                  -10                                  -5  
 His Asn Lys Leu Thr Met Val Pro Pro Asn Ile Ala Glu Leu Lys Asn  
 1                                  5                                  10                                  15  
 Leu Glu Val Leu Asn Phe Phe Asn Asn Gln Ile Glu Glu Leu Pro Thr  
                                   20                                  25                                  30  
 Xaa Ile Ser Ser Leu Gln Lys Leu Lys His Leu Asn Leu Gly Met Asn  
                   35                                  40                                  45  
 Arg Leu Asn Thr Leu Pro Arg Gly Phe Gly Ser Leu Pro Ala Leu Glu  
                   50                                  55                                  60  
 Val Leu Asp Leu Thr Tyr Asn Asn Leu Ser Glu Asn Ser Leu Pro Gly  
 65                                  70                                  75                                  80  
 Asn

<210> 4305  
 <211> 345  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -20...-1  
 <223> score 4.3  
 seq VGCLPVLCSTAG/HL

<400> 4305  
 Met Ala Thr Ala Val Arg Ala Val Gly Cys Leu Pro Val Leu Cys Ser  
 -20                                  -15                                  -10                                  -5  
 Gly Thr Ala Gly His Leu Leu Gly Arg Gln Cys Ser Leu Asn Thr Leu  
                                   1                                  5                                  10  
 Pro Ala Ala Ser Ile Leu Ala Trp Lys Ser Val Leu Gly Asn Gly His  
                   15                                  20                                  25  
 Leu Ser Ser Leu Gly Thr Arg Asp Thr His Pro Tyr Ala Ser Leu Ser  
                   30                                  35                                  40  
 Arg Ala Leu Gln Thr Gln Cys Cys Ile Ser Ser Pro Xaa His Leu Met  
 45                                  50                                  55                                  60  
 Ser Gln Gln Tyr Arg Pro Tyr Ser Phe Phe Thr Lys Leu Thr Ala Asp  
                                   65                                  70                                  75  
 Glu Leu Trp Lys Gly Ala Leu Ala Glu Thr Gly Ala Gly Ala Lys Lys  
                   80                                  85                                  90  
 Gly Arg Gly

004220"666E560

95

<210> 4306  
<211> 162  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -36...-1  
<223> score 8.3  
seq LCLLVFVCLQSL/AM

<400> 4306  
Met His Thr Phe Asn Phe Val Arg Phe Thr His Ala Thr Met Ser Phe  
-35 -30 -25  
Gln Thr Pro Ala Val Lys Arg Leu Cys Leu Leu Val Phe Val Cys Leu  
-20 -15 -10 -5  
Gln Ser Leu Ser Ala Met Ala Leu Ala Gly Cys Trp Lys Ala Ala Cys  
1 5 10  
Gly Gly Arg Trp Phe Arg  
15

<210> 4307  
<211> 234  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -32...-1  
<223> score 11  
seq LGLLLSVLAATLA/QA

<400> 4307  
Met Glu Leu Thr Ser Arg Glu Arg Gly Arg Gly Gln Pro Leu Pro Trp  
-30 -25 -20  
Glu Leu Arg Leu Gly Leu Leu Leu Ser Val Leu Ala Ala Thr Leu Ala  
-15 -10 -5  
Gln Ala Pro Ala Pro Asp Val Pro Gly Cys Ser Arg Gly Ser Cys Tyr  
1 5 10 15  
Pro Ala Xaa Gly Asp Leu Leu Val Gly Arg Ala Asp Arg Leu Thr Ala  
20 25 30  
Ser Ser Thr Cys Gly Leu Asn Gly Pro Ser Leu Leu His Arg  
35 40 45

<210> 4308  
<211> 378  
<212> PRT  
<213> Homo sapiens

<220>



<221> SIGNAL  
 <222> -21...-1  
 <223> score 7.7  
 seq GFVVLVLLQCCSA/YK

<400> 4308  
 Met Gly Val Lys Ala Ser Gln Thr Gly Phe Val Val Leu Val Leu Leu  
 -20 -15 -10  
 Gln Cys Cys Ser Ala Tyr Lys Leu Val Cys Tyr Tyr Thr Ser Trp Ser  
 -5 1 5 10  
 Gln Tyr Arg Glu Gly Asp Gly Ser Cys Phe Pro Asp Ala Leu Asp Arg  
 15 20 25  
 Phe Leu Cys Thr His Ile Ile Tyr Ser Phe Ala Asn Ile Ser Asn Asp  
 30 35 40  
 His Ile Asp Thr Trp Glu Trp Asn Asp Val Thr Leu Tyr Gly Met Leu  
 45 50 55  
 Asn Thr Leu Lys Asn Arg Asn Pro Asn Leu Lys Thr Leu Leu Ser Val  
 60 65 70 75  
 Gly Gly Trp Asn Phe Gly Ser Gln Arg Phe Ser Lys Ile Ala Ser Asn  
 80 85 90  
 Thr Gln Ser Arg Arg Thr Phe Ile Lys Ser Val Pro Pro Phe  
 95 100 105

<210> 4309  
 <211> 441  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -20...-1  
 <223> score 9.1  
 seq LLLLLLVFPATVL/FR

<400> 4309  
 Met Arg Leu Leu Pro Arg Leu Leu Leu Leu Leu Leu Val Phe Pro  
 -20 -15 -10 -5  
 Ala Thr Val Leu Phe Arg Gly Gly Pro Arg Gly Xaa Leu Ala Val Ala  
 1 5 10  
 Gln Asp Leu Thr Glu Asp Glu Glu Thr Val Glu Asp Ser Ile Ile Glu  
 15 20 25  
 Asp Glu Asp Asp Glu Ala Glu Val Glu Glu Asp Glu Pro Thr Asp Leu  
 30 35 40  
 Val Glu Asp Lys Glu Glu Glu Asp Val Ser Gly Glu Pro Glu Ala Ser  
 45 50 55 60  
 Pro Ser Ala Asp Thr Thr Ile Leu Phe Val Lys Gly Glu Asp Phe Pro  
 65 70 75  
 Ala Asn Asn Ile Val Lys Phe Leu Val Gly Phe Thr Asn Lys Gly Thr  
 80 85 90  
 Glu Asp Phe Ile Val Glu Ser Leu Asp Ala Ser Phe Arg Tyr Pro Gln  
 95 100 105  
 Asp Tyr Gln Phe Tyr Ile Gln Asn Phe Thr Ala Leu Pro Leu Asn Thr

004220"666E560

110  
Val Val Pro  
125

115

120

<210> 4310  
<211> 294  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -14..-1  
<223> score 3.7  
seq GLTISSLFSRLFG/KK

<400> 4310  
Met Gly Leu Thr Ile Ser Ser Leu Phe Ser Arg Leu Phe Gly Lys Lys  
                  -10                  -5                  1  
Gln Met Arg Ile Leu Met Val Gly Leu Asp Ala Ala Gly Lys Thr Thr  
          5                  10                  15  
Ile Leu Tyr Lys Leu Lys Leu Gly Glu Ile Val Thr Thr Ile Pro Thr  
      20                  25                  30  
Ile Gly Phe Asn Val Glu Thr Val Glu Tyr Lys Asn Ile Cys Phe Thr  
35                  40                  45                  50  
Val Trp Asp Val Gly Gly Gln Asp Arg Ile Arg Pro Leu Trp Lys His  
          55                  60                  65  
Tyr Phe Gln Asn Thr Gln Gly Leu Ile Phe Val Val Asp Ser Asn Asp  
          70                  75                  80  
Arg Glu

<210> 4311  
<211> 321  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -20..-1  
<223> score 8.4  
seq AVVGCLLVPPAEA/NK

<400> 4311  
Met Lys Leu Leu Ser Leu Val Ala Val Val Gly Cys Leu Leu Val Pro  
-20                  -15                  -10                  -5  
Pro Ala Glu Ala Asn Lys Ser Ser Glu Asp Ile Arg Cys Lys Cys Ile  
          1                  5                  10  
Cys Pro Pro Tyr Arg Asn Ile Ser Gly His Ile Tyr Asn Gln Asn Val  
      15                  20                  25  
Ser Gln Lys Asp Cys Asn Cys Leu His Val Val Glu Pro Met Xaa Val  
      30                  35                  40  
Pro Gly His Asp Val Glu Ala Tyr Cys Leu Leu Cys Glu Cys Arg Tyr  
45                  50                  55                  60

Glu Glu Arg Xaa Pro Pro Pro Ser Arg Ser Ser Leu Ser Ser Thr Cys  
65 70 75  
Pro Trp Trp Val Pro Val Ala Leu His Gly Phe  
80 85

<210> 4312  
<211> 354  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -38..-1  
<223> score 6.3  
seq GLSISLRLTGSSA/QE

<400> 4312  
Met Ala Ala Gly Ile Val Ala Ser Arg Arg Leu Arg Asp Leu Leu Thr  
-35 -30 -25  
Arg Arg Leu Thr Gly Ser Asn Tyr Pro Gly Leu Ser Ile Ser Leu Arg  
-20 -15 -10  
Leu Thr Gly Ser Ser Ala Gln Glu Ala Ala Ser Gly Val Ala Leu Gly  
-5 1 5 10  
Glu Ala Pro Asp His Ser Tyr Glu Ser Leu Arg Val Thr Ser Ala Gln  
15 20 25  
Lys His Val Leu His Val Gln Leu Asn Arg Pro Asn Lys Arg Asn Ala  
30 35 40  
Met Asn Lys Val Phe Trp Arg Glu Met Val Glu Cys Phe Asn Lys Ile  
45 50 55  
Ser Arg Asp Ala Asp Cys Arg Ala Val Val Ile Ser Gly Ala Gly Lys  
60 65 70  
Met Phe Thr Ala Gly Ile  
75 80

<210> 4313  
<211> 315  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -21..-1  
<223> score 9.5  
seq LGLVLCLAQTIHT/QE

<400> 4313  
Met Ser Pro His Pro Thr Ala Leu Leu Gly Leu Val Leu Cys Leu Ala  
-20 -15 -10  
Gln Thr Ile His Thr Gln Glu Glu Asp Leu Pro Arg Pro Ser Ile Ser  
-5 1 5 10  
Ala Glu Pro Gly Thr Val Ile Pro Leu Gly Ser His Val Thr Phe Val  
15 20 25

Cys Arg Gly Pro Val Gly Val Gln Thr Phe Arg Leu Glu Arg Glu Ser  
 30 35 40  
 Arg Ser Thr Xaa Asn Asp Thr Glu Asp Val Ser Gln Ala Ser Pro Ser  
 45 50 55  
 Glu Ser Glu Ala Arg Phe Arg Ile Asp Ser Val Ser Glu Gly Asn Ala  
 60 65 70 75  
 Gly Pro Tyr Arg Cys Ile Tyr Tyr Lys  
 80

<210> 4314  
 <211> 300  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -18...-1  
 <223> score 11.7  
 seq VLLLLLLVEQAAA/LG

<400> 4314  
 Met Ile Pro Ala Val Val Leu Leu Leu Leu Leu Val Glu Gln Ala  
 -15 -10 -5  
 Ala Ala Leu Gly Glu Pro Gln Leu Cys Tyr Ile Leu Asp Ala Ile Leu  
 1 5 10  
 Phe Leu Tyr Gly Ile Val Leu Thr Leu Leu Tyr Cys Arg Leu Lys Ile  
 15 20 25 30  
 Gln Val Arg Lys Ala Ala Ile Thr Ser Tyr Glu Lys Ser Asp Gly Val  
 35 40 45  
 Tyr Thr Met Glu Ser Pro Ser Ile Thr Arg Leu Glu Cys Ser Gly Met  
 50 55 60  
 Ile Trp Ala His Cys Asn Leu Cys Leu Pro Gly Ser Arg Asp Ser Arg  
 65 70 75  
 Ala Ser Ala Ser  
 80

<210> 4315  
 <211> 333  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -26...-1  
 <223> score 8.9  
 seq GLLWAFCAPGARA/EE

<400> 4315  
 Met Thr Met Arg Ser Leu Leu Arg Thr Pro Phe Leu Cys Gly Leu Leu  
 -25 -20 -15  
 Trp Ala Phe Cys Ala Pro Gly Ala Arg Ala Glu Pro Ala Ala Ser  
 -10 -5 1 5

Phe	Ser	Gln	Pro	Gly	Ser	Met	Gly	Leu	Asp	Lys	Asn	Thr	Val	His	Asp
		10					15					20			
Gln	Glu	His	Ile	Met	Glu	His	Leu	Glu	Gly	Val	Ile	Asn	Lys	Pro	Glu
	25						30				35				
Ala	Glu	Met	Ser	Pro	Gln	Glu	Leu	Gln	Leu	His	Tyr	Phe	Lys	Met	His
	40					45				50					
Asp	Tyr	Asp	Gly	Asn	Asn	Leu	Leu	Asp	Gly	Leu	Glu	Leu	Ser	Thr	Ala
55				60					65					70	
Ile	Thr	His	Val	His	Lys	Glu	Glu	Gly	Xaa	Glu	Gln	Ala	Pro	Leu	
			75					80						85	

<210> 4316  
 <211> 384  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -24...-1  
 <223> score 3.8  
 seq VVALAGVLQSGFQ/EL

Met	Ala	Ser	Ser	Ala	Glu	Gly	Asp	Glu	Gly	Thr	Val	Val	Ala	Leu	Ala
			-20					-15						-10	
Gly	Val	Leu	Gln	Ser	Gly	Phe	Gln	Glu	Leu	Ser	Leu	Asn	Lys	Leu	Ala
		-5					1				5				
Thr	Ser	Leu	Gly	Ala	Ser	Glu	Gln	Ala	Leu	Arg	Leu	Ile	Ile	Ser	Ile
	10				15					20					
Phe	Leu	Gly	Tyr	Pro	Phe	Ala	Leu	Phe	Tyr	Arg	His	Tyr	Leu	Phe	Tyr
25				30					35					40	
Lys	Glu	Thr	Tyr	Leu	Ile	His	Leu	Phe	His	Thr	Phe	Thr	Gly	Leu	Ser
			45					50						55	
Ile	Ala	Tyr	Phe	Asn	Phe	Gly	Asn	Gln	Leu	Tyr	His	Ser	Leu	Leu	Cys
		60					65					70			
Ile	Val	Leu	Gln	Phe	Leu	Ile	Leu	Arg	Leu	Met	Gly	Arg	Thr	Ile	Thr
	75					80						85			
Ala	Val	Leu	Thr	Thr	Phe	Cys	Phe	Gln	Met	Ala	Xaa	Leu	Leu	Ala	Gly
	90					95					100				

<210> 4317  
 <211> 189  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -35...-1  
 <223> score 5.1  
 seq FLLFRSLPRXXFG/LV

<400> 4317

004220" 666EFS60

Met Val His Leu Leu Val Leu Ser Gly Ala Trp Gly Met Gln Met Trp  
 -35 -30 -25 -20  
 Val Thr Phe Val Ser Gly Phe Leu Leu Phe Arg Ser Leu Pro Arg Xaa  
 -15 -10 -5  
 Xaa Phe Gly Leu Val Xaa Gly Lys Leu Phe Pro Phe Xaa Xaa Xaa Ile  
 1 5 10  
 Ser Met Gly Cys Ala Ser Ser Thr Ser Ala Ser Trp Leu His Ser  
 15 20 25

<210> 4318  
 <211> 225  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -24...-1  
 <223> score 6.6  
 seq KMVHLLVLSGAWG/MQ

<400> 4318  
 Met Glu Glu Gly Gly Asn Leu Gly Gly Leu Ile Lys Met Val His Leu  
 -20 -15 -10  
 Leu Val Leu Ser Gly Ala Trp Gly Met Gln Met Trp Val Thr Phe Val  
 -5 1 5  
 Ser Gly Phe Leu Leu Phe Arg Ser Leu Pro Arg His Thr Phe Gly Leu  
 10 15 20  
 Val Gln Ser Lys Leu Phe Pro Phe Tyr Phe His Ile Ser Met Gly Cys  
 25 30 35 40  
 Ala Ser Ser Thr Ser Ala Ser Trp Leu His Ser  
 45 50

<210> 4319  
 <211> 372  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 7.4  
 seq LIWASSFFTLQL/KP

<400> 4319  
 Met Arg Leu Leu Trp Gly Leu Ile Trp Ala Ser Ser Phe Phe Thr Leu  
 -15 -10 -5  
 Ser Leu Gln Lys Pro Arg Leu Leu Leu Phe Ser Pro Ser Val Val His  
 1 5 10  
 Leu Gly Val Pro Leu Ser Val Gly Val Gln Leu Gln Asp Val Pro Arg  
 15 20 25  
 Gly Gln Val Val Lys Gly Ser Val Phe Leu Arg Asn Pro Ser Arg Asn  
 30 35 40 45

Asn Val Pro Cys Ser Pro Lys Val Asp Phe Thr Leu Ser Ser Glu Arg  
                     50                    55                    60  
 Asp Phe Ala Leu Leu Ser Leu Gln Val Pro Leu Lys Asp Ala Lys Ser  
                     65                    70                    75  
 Cys Gly Leu His Gln Leu Leu Arg Gly Pro Glu Val Gln Leu Val Ala  
                     80                    85                    90  
 His Ser Pro Trp Leu Lys Asp Ser Leu Ser Arg Thr  
                     95                    100                    105

<210> 4320  
 <211> 294  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -39...-1  
 <223> score 4.9  
       seq IILVGLLHMVLLS/IP

<400> 4320  
 Met Asn Val Gly Val Ala His Ser Glu Val Asn Pro Asn Thr Arg Val  
                     -35                    -30                    -25  
 Met Asn Ser Arg Gly Ile Trp Leu Ala Tyr Ile Ile Leu Val Gly Leu  
                     -20                    -15                    -10  
 Leu His Met Val Leu Leu Ser Ile Pro Phe Phe Ser Ile Pro Val Val  
                     -5                    1                    5  
 Trp Thr Leu Thr Asn Val Ile His Asn Leu Ala Thr Tyr Val Phe Leu  
 10                    15                    20                    25  
 His Thr Val Lys Gly Thr Pro Phe Glu Thr Pro Asp Gln Gly Lys Ala  
                     30                    35                    40  
 Arg Leu Leu Thr His Trp Glu Gln Met Asp Tyr Gly Leu Gln Phe Thr  
                     45                    50                    55  
 Leu Pro

<210> 4321  
 <211> 276  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -20...-1  
 <223> score 3.5  
       seq IVLGTGLTECILS/GI

<400> 4321  
 Met Asn Glu Glu Tyr Asp Val Ile Val Leu Gly Thr Gly Leu Thr Glu  
 -20                    -15                    -10                    -5  
 Cys Ile Leu Ser Gly Ile Met Ser Val Asn Gly Lys Lys Val Leu His  
                     1                    5                    10  
 Met Asp Arg Asn Pro Tyr Tyr Gly Gly Glu Ser Ala Ser Ile Thr Pro

15                      20                      25  
 Leu Glu Asp Leu Tyr Lys Arg Phe Lys Ile Pro Gly Ser Pro Xaa Glu  
 30                      35                      40  
 Ser Met Gly Arg Gly Arg Xaa Trp Asn Val Asp Leu Ile Pro Lys Phe  
 45                      50                      55                      60  
 Leu Met Ala Asn Gly Gln Leu Val Lys Met Leu Leu  
                     65                      70

<210> 4322  
 <211> 264  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -15...-1  
 <223> score 9.6  
       seq EYVLLLFLALCSA/KP

<400> 4322  
 Met Lys Glu Tyr Val Leu Leu Leu Phe Leu Ala Leu Cys Ser Ala Lys  
 -15                      -10                      -5                      1  
 Pro Phe Phe Ser Pro Ser His Ile Ala Leu Lys Asn Met Met Leu Lys  
                     5                      10                      15  
 Asp Met Glu Asp Thr Asp Asp Asp Asp Asp Asp Asp Asp Asp Asp  
                     20                      25                      30  
 Asp Asp Glu Asp Asn Ser Leu Phe Pro Thr Arg Glu Pro Arg Ser His  
                     35                      40                      45  
 Phe Phe Pro Phe Asp Leu Phe Pro Met Cys Pro Phe Gly Cys Gln Cys  
 50                      55                      60                      65  
 Tyr Ser Arg Val Val His Cys Ser  
                     70

<210> 4323  
 <211> 390  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -23...-1  
 <223> score 11.2  
       seq GLLLLLWGSCFTG/LP

<400> 4323  
 Met Asp Gly Trp Arg Arg Met Pro Arg Trp Gly Leu Leu Leu Leu Leu  
                     -20                      -15                      -10  
 Trp Gly Ser Cys Thr Phe Gly Leu Pro Thr Asp Thr Thr Thr Phe Lys  
                     -5                      1                      5  
 Arg Ile Phe Leu Lys Arg Met Pro Ser Ile Arg Glu Ser Leu Lys Glu  
 10                      15                      20                      25  
 Arg Gly Val Asp Met Ala Arg Leu Gly Pro Glu Trp Ser Gln Pro Met



				30					35					40			
Lys	Arg	Leu	Thr	Leu	Gly	Asn	Thr	Thr	Ser	Ser	Val	Ile	Leu	Thr	Asn		
			45					50					55				
Tyr	Met	Asp	Thr	Gln	Tyr	Tyr	Gly	Glu	Ile	Gly	Ile	Gly	Thr	Pro	Pro		
		60					65					70					
Gln	Thr	Phe	Lys	Val	Val	Phe	Asp	Thr	Gly	Ser	Ser	Asn	Val	Trp	Val		
	75					80					85						
Pro	Ser	Ser	Lys	Cys	Ser	Arg	Leu	Tyr	Thr	Ala	Cys	Val	Tyr	His	Lys		
90					95					100					105		
Leu	Phe																

<210> 4324  
 <211> 345  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -32...-1  
 <223> score 5  
 seq LCLLSLLPSGFMS/LD

Met	Leu	Val	Arg	Arg	Gly	Ala	Arg	Ala	Gly	Pro	Arg	Met	Pro	Arg	Gly		
		-30					-25					-20					
Trp	Thr	Ala	Leu	Cys	Leu	Leu	Ser	Leu	Leu	Pro	Ser	Gly	Phe	Met	Ser		
		-15				-10					-5						
Leu	Asp	Asn	Asn	Gly	Thr	Ala	Thr	Pro	Glu	Leu	Pro	Thr	Gln	Gly	Thr		
1			5						10					15			
Phe	Ser	Asn	Val	Ser	Thr	Asn	Val	Ser	Tyr	Gln	Glu	Thr	Thr	Thr	Pro		
		20					25					30					
Xaa	Thr	Leu	Gly	Ser	Thr	Ser	Leu	His	Pro	Val	Ser	Gln	His	Gly	Asn		
		35				40						45					
Glu	Ala	Thr	Thr	Asn	Ile	Thr	Glu	Thr	Thr	Val	Xaa	Phe	Thr	Ser	Xaa		
	50				55					60							
Ser	Val	Ile	Xaa	Ser	Val	Tyr	Gly	Asn	Thr	Asn	Ser	Ser	Val	Gln	Ser		
65				70					75					80			
Gln	Thr	Ser															

<210> 4325  
 <211> 240  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -35...-1  
 <223> score 3.6  
 seq LEPLSSSAACNG/KE

<400> 4325  
 Met Pro Phe Gln Phe Gly Thr Gln Pro Arg Arg Phe Pro Val Glu Gly

-35                      -30                      -25                      -20  
 Gly Asp Ser Ser Ile Glu Leu Glu Pro Gly Leu Ser Ser Ser Ala Ala  
                                  -15                      -10                      -5  
 Cys Asn Gly Lys Glu Met Ser Pro Thr Arg Gln Leu Arg Arg Cys Pro  
                                  1                      5                      10  
 Gly Ser His Cys Leu Thr Ile Thr Asp Val Pro Val Thr Val Tyr Ala  
          15                      20                      25  
 Thr Thr Arg Lys Pro Pro Ala Gln Ser Ser Lys Glu Met His Pro Lys  
 30                      35                      40                      45

<210> 4326

<211> 243

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -26...-1

<223> score 8.8

seq AVLVLFFVSTIVS/QW

<400> 4326

Met Leu Leu Leu Leu Ser Ile Ile Val Leu His Val Ala Val Leu  
          -25                      -20                      -15  
 Val Leu Leu Phe Val Ser Thr Ile Val Ser Gln Trp Ile Val Gly Asn  
          -10                      -5                      1                      5  
 Gly His Ala Thr Asp Leu Trp Gln Asn Cys Ser Thr Ser Ser Ser Gly  
                          10                      15                      20  
 Lys Cys Pro Pro Leu Phe Phe Ile Ile Thr Lys Arg Met Ala Ala Val  
                  25                      30                      35  
 Cys Pro Gly His His Asp Pro Val Asp His Leu Gln His Ser Val Ser  
          40                      45                      50  
 Val  
 55

<210> 4327

<211> 153

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -26...-1

<223> score 8.8

seq AVLVLFFVSTIVS/QW

<400> 4327

Met Leu Leu Leu Leu Ser Ile Ile Val Leu His Val Ala Val Leu  
          -25                      -20                      -15  
 Val Leu Leu Phe Val Ser Thr Ile Val Ser Gln Trp Ile Val Gly Asn  
          -10                      -5                      1                      5  
 Gly His Ala Thr Asp Leu Trp Gln Asn Cys Ser Thr Ser Ser Ser Gly

Asn Ala His 10 15 20  
25

<210> 4328  
<211> 198  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -16..-1  
<223> score 10.5  
seq LWRLVSLLLALSQA/LP

<400> 4328  
Met Trp Pro Leu Trp Arg Leu Val Ser Leu Leu Ala Leu Ser Gln Ala  
-15 -10 -5  
Leu Pro Phe Glu Gln Arg Gly Phe Trp Asp Phe Thr Leu Asp Asp Gly  
1 5 10 15  
Pro Phe Met Met Asn Asp Glu Glu Ala Ser Gly Ala Asp Thr Ser Gly  
20 25 30  
Val Xaa Asp Pro Asp Ser Val Thr Pro Thr His Val Thr Ile Asn Tyr  
35 40 45  
Leu Tyr  
50

<210> 4329  
<211> 438  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -20..-1  
<223> score 6.6  
seq SALAARLLQPAHS/CS

<400> 4329  
Met Ala Ala Thr Ser Leu Met Ser Ala Leu Ala Ala Arg Leu Leu Gln  
-20 -15 -10 -5  
Pro Ala His Ser Cys Ser Leu Arg Leu Arg Pro Phe His Leu Ala Ala  
1 5 10  
Xaa Arg Asn Glu Ala Val Val Ile Ser Gly Arg Lys Leu Ala Gln Gln  
15 20 25  
Ile Lys Gln Glu Val Arg Gln Glu Val Glu Glu Trp Val Ala Ser Gly  
30 35 40  
Asn Lys Arg Pro His Leu Ser Gly Ser Trp Leu Ala Arg Ile Leu Gln  
45 50 55 60  
Val Thr Pro Met Ser Ser Thr Lys Pro Arg Ala Ala Val Val Gly  
65 70 75  
Ile Asn Ser Glu Thr Ile Met Lys Pro Ala Ser Ile Ser Glu Glu Glu

80 85 90  
 Leu Leu Asn Leu Ile Asn Lys Leu Asn Asn Asp Asp Asn Val Asp Gly  
 95 100 105  
 Leu Leu Val Gln Leu Pro Leu Pro Glu His Ile Asp Glu Arg Arg Ile  
 110 115 120  
 Cys Asn  
 125

<210> 4330  
 <211> 216  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -20...-1  
 <223> score 10.6  
 seq LLLLLPLVHVSAT/TP

<400> 4330  
 Met Glu Arg Ala Ser Cys Leu Leu Leu Leu Leu Pro Leu Val His  
 -20 -15 -10 -5  
 Val Ser Ala Thr Thr Pro Glu Pro Cys Glu Leu Asp Asp Glu Asp Phe  
 1 5 10  
 Arg Cys Val Cys Asn Phe Ser Glu Pro Gln Pro Asp Trp Ser Glu Ala  
 15 20 25  
 Phe Gln Cys Val Ser Ala Val Glu Val Glu Ile His Ala Gly Gly Leu  
 30 35 40  
 Asn Leu Glu Pro Phe Leu Lys Arg  
 45 50

<210> 4331  
 <211> 312  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -15...-1  
 <223> score 12.6  
 seq WLLLLGLVASEC/IM

<400> 4331  
 Met Lys Trp Leu Leu Leu Leu Gly Leu Val Ala Leu Ser Glu Cys Ile  
 -15 -10 -5 1  
 Met Tyr Lys Val Pro Leu Ile Arg Lys Lys Ser Leu Arg Arg Thr Leu  
 5 10 15  
 Ser Glu Arg Gly Leu Leu Lys Asp Phe Leu Lys Lys His Asn Leu Asn  
 20 25 30  
 Pro Ala Arg Lys Tyr Phe Pro Gln Trp Glu Ala Pro Thr Leu Val Asp  
 35 40 45  
 Glu Gln Pro Leu Glu Asn Tyr Leu Asp Met Glu Tyr Phe Gly Thr Ile

004220"666E1550

50                      55                      60                      65  
 Gly Ile Gly Thr Pro Ala Gln Asp Phe Thr Val Val Phe Xaa Thr Gly  
                              70                      75                      80  
 Ser Ser Asn Leu Trp Val Pro Ser  
                              85

<210> 4332  
 <211> 291  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19..-1  
 <223> score 5.9  
       seq ALMYLGSLAFLGA/DT

<400> 4332  
 Met Lys Leu Val Ser Val Ala Leu Met Tyr Leu Gly Ser Leu Ala Phe  
                              -15                      -10                      -5  
 Leu Gly Ala Asp Thr Ala Arg Leu Asp Val Ala Ser Glu Phe Arg Lys  
                              1                      5                      10  
 Lys Trp Asn Lys Trp Ala Leu Ser Arg Gly Lys Arg Glu Leu Arg Met  
                              15                      20                      25  
 Ser Ser Ser Tyr Pro Thr Gly Leu Ala Asp Val Lys Ala Gly Pro Ala  
 30                               35                      40                      45  
 Gln Thr Leu Ile Arg Pro Gln Asp Met Lys Gly Ala Ser Arg Ser Pro  
                              50                      55                      60  
 Glu Asp Ser Ser Pro Asp Ala Ala Arg Ile Arg Val Lys Arg Tyr Arg  
                              65                      70                      75  
 Gly

<210> 4333  
 <211> 249  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -24..-1  
 <223> score 10.5  
       seq LVLVSMALGTLA/EA

<400> 4333  
 Met Ala Thr Met Glu Asn Lys Val Ile Cys Ala Leu Val Leu Val Ser  
                              -20                      -15                      -10  
 Met Leu Ala Leu Gly Thr Leu Ala Glu Ala Gln Thr Glu Thr Cys Thr  
                              -5                      1                      5  
 Val Ala Pro Arg Glu Arg Gln Asn Cys Gly Phe Pro Gly Val Thr Pro  
                              10                      15                      20  
 Ser Gln Cys Ala Asn Lys Gly Cys Cys Phe Asp Asp Thr Val Arg Gly  
 25                               30                      35                      40

Val Pro Trp Cys Phe Tyr Pro Asn Thr Ile Asp Val Pro Pro Glu Glu  
 45 50 55  
 Glu Cys Glu

<210> 4334  
 <211> 312  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -28..-1  
 <223> score 5.3  
 seq ASCLVLAARHASA/SS

<400> 4334  
 Met Ala Leu Leu Thr Ala Ala Ala Arg Leu Leu Gly Thr Lys Asn Ala  
 -25 -20 -15  
 Ser Cys Leu Val Leu Ala Ala Arg His Ala Ser Ala Ser Ser Thr Asn  
 -10 -5 1  
 Leu Lys Asp Ile Leu Ala Asp Leu Ile Pro Lys Glu Gln Ala Arg Ile  
 5 10 15 20  
 Lys Thr Phe Arg Gln Gln His Gly Lys Thr Val Val Gly Gln Ile Thr  
 25 30 35  
 Val Asp Met Met Tyr Gly Gly Met Arg Gly Met Lys Gly Leu Val Tyr  
 40 45 50  
 Glu Thr Ser Val Leu Asp Pro Asp Glu Gly Ile Arg Phe Arg Gly Phe  
 55 60 65  
 Ser Ile Pro Glu Cys Gln Lys Leu  
 70 75

<210> 4335  
 <211> 195  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -17..-1  
 <223> score 11.5  
 seq LLPILLLLSGWAFC/SQ

<400> 4335  
 Met Leu Thr Thr Leu Leu Pro Ile Leu Leu Leu Ser Gly Trp Ala Phe  
 -15 -10 -5  
 Cys Ser Gln Asp Ala Ser Asp Gly Leu Gln Arg Leu His Met Leu Gln  
 1 5 10 15  
 Ile Ser Tyr Phe Arg Asp Pro Tyr His Val Trp Tyr Gln Gly Asn Ala  
 20 25 30  
 Ser Leu Gly Gly His Leu Thr His Val Leu Glu Gly Pro Asp Thr Asn  
 35 40 45  
 Thr

<210> 4336  
 <211> 204  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -27...-1  
 <223> score 5.7  
 seq LVSLFCSCFLADP/LN

<400> 4336  
 Met Thr Leu Ala Ala Tyr Lys Glu Lys Met Lys Glu Leu Pro Leu Val  
           -25                  -20                  -15  
 Ser Leu Phe Cys Ser Cys Phe Leu Ala Asp Pro Leu Asn Lys Ser Ser  
       -10                  -5                  1                  5  
 Tyr Lys Tyr Glu Gly Trp Cys Gly Arg Gln Cys Arg Arg Lys Asp Glu  
                   10                  15                  20  
 Ser Gln Arg Lys Asp Ser Ala Asp Trp Arg Glu Xaa Arg Ala Gln Ala  
           25                  30                  35  
 Asp Thr Val Asp  
       40

<210> 4337  
 <211> 387  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -23...-1  
 <223> score 10.6  
 seq CMLLLAFSSWSLC/SD

<400> 4337  
 Met Met Ala Gly Met Lys Ile Gln Leu Val Cys Met Leu Leu Leu Ala  
           -20                  -15                  -10  
 Phe Ser Ser Trp Ser Leu Cys Ser Asp Ser Glu Glu Glu Met Lys Ala  
       -5                  1                  5  
 Leu Glu Ala Asp Phe Leu Thr Asn Met His Thr Ser Lys Ile Ser Lys  
 10                  15                  20                  25  
 Ala His Val Pro Ser Trp Lys Met Thr Leu Leu Asn Val Cys Ser Leu  
           30                  35                  40  
 Val Asn Asn Leu Asn Ser Pro Ala Glu Glu Thr Gly Glu Val His Glu  
       45                  50                  55  
 Glu Glu Leu Val Ala Arg Arg Lys Leu Pro Thr Ala Leu Asp Gly Phe  
       60                  65                  70  
 Ser Leu Glu Ala Met Leu Thr Ile Tyr Gln Leu His Lys Xaa Cys His  
       75                  80                  85  
 Ser Arg Ala Phe Gln His Trp Glu Leu Ile Gln Glu Asp Ile Leu Asp  
 90                  95                  100                  105

004220"666ET560

Thr

<210> 4338  
<211> 393  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -31...-1  
<223> score 11.5  
seq LLLFLLGPRLVLA/IS

<400> 4338  
Met Ser Gly Leu Ser Gly Pro Pro Ala Arg Arg Gly Pro Phe Pro Leu  
-30 -25 -20  
Ala Leu Leu Leu Leu Phe Leu Leu Gly Pro Arg Leu Val Leu Ala Ile  
-15 -10 -5 1  
Ser Phe His Leu Pro Ile Asn Ser Arg Lys Cys Leu Arg Glu Glu Ile  
5 10 15  
His Lys Asp Leu Leu Val Thr Gly Ala Tyr Glu Ile Ser Asp Gln Ser  
20 25 30  
Gly Gly Ala Gly Gly Leu Arg Xaa Thr Ser Arg Ser Gln Ile Leu Leu  
35 40 45  
Ala Ile Phe Ser Thr Pro Lys Arg Met Gln Pro Arg Gly Asn Leu Pro  
50 55 60 65  
Leu Pro Leu Lys Ile Met Thr Cys Leu Lys Cys Val Leu Arg Ala Arg  
70 75 80  
Glu Gln Gly Thr Gly Arg Ile Pro Asp Gln Leu Val Ile Leu Asp Met  
85 90 95  
Lys His Gly  
100

<210> 4339  
<211> 321  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -13...-1  
<223> score 3.5  
seq MAATLLAARGAGP/AP

<400> 4339  
Met Ala Ala Thr Leu Leu Ala Ala Arg Gly Ala Gly Pro Ala Pro Ala  
-10 -5 1  
Trp Gly Pro Glu Gly Ser Leu Gln Thr Gly Lys Ala Glu Lys Phe Pro  
5 10 15  
Leu Gly Xaa Tyr Ile Ala Asn Arg Val Thr Asp Lys Leu Thr Pro Ile  
20 25 30 35  
His Asp Arg Ile Phe Cys Cys Arg Ser Gly Ser Ala Ala Asp Thr Gln



40 45 50  
 Ala Val Ala Asp Ala Val Thr Tyr Gln Leu Gly Phe His Ser Ile Glu  
 55 60 65  
 Leu Asn Glu Pro Pro Leu Val His Thr Ala Ala Ser Leu Phe Lys Glu  
 70 75 80  
 Met Cys Tyr Arg Tyr Arg Glu Asp Leu Met Ala  
 85 90

<210> 4340  
 <211> 270  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -14...-1  
 <223> score 15  
 seq LLPLLLLLPMCWA/VE

<400> 4340  
 Met Leu Leu Pro Leu Leu Leu Leu Leu Pro Met Cys Trp Ala Val Glu  
 -10 -5 1  
 Val Lys Arg Pro Arg Gly Val Ser Leu Thr Asn His His Phe Tyr Asp  
 5 10 15  
 Glu Ser Lys Pro Phe Thr Cys Leu Asp Gly Ser Ala Thr Ile Pro Phe  
 20 25 30  
 Asp Gln Val Asn Asp Asp Tyr Cys Asp Cys Lys Asp Gly Ser Asp Glu  
 35 40 45 50  
 Pro Gly Thr Ala Ala Cys Pro Asn Gly Ser Phe His Cys Thr Asn Thr  
 55 60 65  
 Gly Tyr Lys Pro Leu Tyr Ile Pro Ser Asn  
 70 75

<210> 4341  
 <211> 327  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 8.1  
 seq LLGVLVSPDALG/ST

<400> 4341  
 Met Ala Thr Leu Leu Leu Leu Gly Val Leu Val Val Ser Pro Asp  
 -15 -10 -5  
 Ala Leu Gly Ser Thr Thr Ala Val Gln Thr Pro Thr Ser Gly Glu Pro  
 1 5 10  
 Leu Val Ser Thr Ser Glu Pro Leu Ser Ser Lys Met Tyr Thr Thr Ser  
 15 20 25  
 Ile Thr Ser Asp Pro Lys Ala Asp Ser Thr Gly Asp Gln Thr Ser Ala

30                      35                      40                      45  
 Leu Pro Pro Ser Thr Ser Ile Asn Glu Gly Ser Pro Leu Trp Thr Ser  
                                  50                      55                      60  
 Ile Gly Ala Ser Thr Gly Ser Pro Leu Pro Glu Pro Thr Thr Tyr Gln  
                                  65                      70                      75  
 Glu Val Ser Ile Lys Met Ser Xaa Val Pro Gln Glu Thr  
                                  80                      85                      90

<210> 4342  
 <211> 177  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -21...-1  
 <223> score 11.2  
       seq LLCLFSLLTQVTT/EP

<400> 4342  
 Met Glu Leu Trp Gly Ala Tyr Leu Leu Leu Cys Leu Phe Ser Leu Leu  
       -20                      -15                      -10  
 Thr Gln Val Thr Thr Glu Pro Pro Thr Gln Lys Pro Lys Lys Ile Val  
       -5                      1                      5                      10  
 Asn Ala Lys Lys Asp Val Val Asn Thr Lys Met Phe Glu Glu Leu Lys  
                                  15                      20                      25  
 Ser Arg Leu Asp Thr Leu Ala Gln Glu Val Ala  
                                  30                      35

<210> 4343  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -36...-1  
 <223> score 5.4  
       seq LLCYPGWSAVAQS/QL

<400> 4343  
 Met Ile Gln Ala Thr Ser Leu Ser Ser Leu Ile Leu Gly Phe Ser Phe  
       -35                      -30                      -25  
 Leu Phe Phe Glu Asp Gly Val Leu Leu Cys Tyr Pro Gly Trp Ser Ala  
       -20                      -15                      -10                      -5  
 Val Ala Gln Ser Gln Leu Thr Ala Ala Ser Val Phe Trp Asp Gln Val  
                                  1                      5                      10  
 Ile Leu Pro  
                                  15

<210> 4344  
 <211> 465

<212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -36...-1  
 <223> score 10.1  
 seq SFVVLALFAVTQA/EE

<400> 4344  
 Met Leu Thr Leu Ser Ser Cys Leu Cys Gly Ser Gly Lys Ala Phe Gly  
 -35 -30 -25  
 Met Pro Thr Met Arg Leu Leu Ser Phe Val Val Leu Ala Leu Phe Ala  
 -20 -15 -10 -5  
 Val Thr Gln Ala Glu Glu Gly Ala Arg Leu Leu Ala Ser Lys Ser Leu  
 1 5 10  
 Leu Asn Arg Tyr Ala Val Glu Gly Arg Asp Leu Thr Leu Gln Tyr Asn  
 15 20 25  
 Ile Tyr Asn Val Gly Ser Ser Ala Ala Leu Asp Val Glu Leu Ser Asp  
 30 35 40  
 Asp Ser Phe Pro Pro Glu Asp Phe Gly Ile Val Ser Gly Met Leu Asn  
 45 50 55 60  
 Val Lys Trp Asp Arg Ile Ala Pro Ala Ser Asn Val Ser His Thr Val  
 65 70 75  
 Val Leu Arg Pro Leu Lys Ala Gly Tyr Phe Asn Phe Thr Ser Ala Thr  
 80 85 90  
 Ile Thr Tyr Leu Ala Gln Glu Asp Gly Pro Val Val Ile Gly Ser Thr  
 95 100 105  
 Ser Ala Leu Asp Arg Glu Glu Ser Trp Leu Ser  
 110 115

<210> 4345  
 <211> 444  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -36...-1  
 <223> score 10.1  
 seq SFVVLALFAVTQA/EE

<400> 4345  
 Met Leu Thr Leu Ser Ser Cys Leu Cys Gly Ser Gly Lys Ala Phe Gly  
 -35 -30 -25  
 Met Pro Thr Met Arg Leu Leu Ser Phe Val Val Leu Ala Leu Phe Ala  
 -20 -15 -10 -5  
 Val Thr Gln Ala Glu Glu Gly Ala Arg Leu Leu Ala Ser Lys Ser Leu  
 1 5 10  
 Leu Asn Arg Tyr Ala Val Glu Gly Arg Asp Leu Thr Leu Gln Tyr Asn  
 15 20 25  
 Ile Tyr Asn Val Gly Ser Ser Ala Ala Leu Asp Val Glu Leu Ser Asp

30                      35                      40  
 Asp Ser Phe Pro Pro Glu Asp Phe Gly Ile Val Ser Gly Met Leu Asn  
 45                      50                      55                      60  
 Val Lys Trp Asp Arg Ile Ala Pro Ala Ser Asn Val Ser His Thr Val  
                     65                      70                      75  
 Val Leu Arg Pro Leu Lys Ala Leu Gly Ile Pro Leu His Leu Ala Tyr  
                     80                      85                      90  
 Asn Ser Ser Leu Val Thr Phe Gln Glu Pro Pro Gly Val Asn Thr Thr  
                     95                      100                      105  
 Glu Leu Pro Ser  
 110

<210> 4346  
 <211> 258  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -41..-1  
 <223> score 3.9  
       seq ALFLCGCYVVALG/AH

<400> 4346  
 Met Ala His Ala His Ile Gln Gly Gly Arg Arg Ala Lys Ser Arg Phe  
       -40                      -35                      -30  
 Val Val Cys Ile Met Ser Gly Ala Arg Ser Lys Leu Ala Leu Phe Leu  
       -25                      -20                      -15                      -10  
 Cys Gly Cys Tyr Val Val Ala Leu Gly Ala His Thr Gly Glu Glu Ser  
                     -5                      1                      5  
 Val Ala Asp His His Glu Ala Glu Tyr Tyr Val Ala Ala Val Tyr Glu  
                     10                      15                      20  
 His Pro Ser Ile Leu Ser Leu Asn Pro Leu Ala Leu Ile Ser Arg Gln  
       25                      30                      35  
 Glu Ala Leu Glu Leu Met  
 40                      45

<210> 4347  
 <211> 177  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -16..-1  
 <223> score 4.3  
       seq ALPAAGFLYWVGA/GT

<400> 4347  
 Met Glu Ser Ala Leu Pro Ala Ala Gly Phe Leu Tyr Trp Val Gly Ala  
       -15                      -10                      -5  
 Gly Thr Val Ala Tyr Leu Ala Leu Arg Ile Ser Tyr Ser Leu Phe Thr

1                    5                    10                    15  
 Ala Leu Arg Val Trp Gly Val Gly Asn Glu Ala Gly Val Gly Arg Gly  
                   20                    25                    30  
 Ser Glu Asn Gly Gln Leu Ser Gln Val Val Leu  
                   35                    40

<210> 4348  
 <211> 306  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -30...-1  
 <223> score 7.3  
       seq LKLLILSMAAVLS/FS

<400> 4348  
 Met Thr Lys Phe Gly Phe Leu Arg Leu Ser Tyr Glu Lys Gln Asp Thr  
 -30                    -25                    -20                    -15  
 Leu Leu Lys Leu Leu Ile Leu Ser Met Ala Ala Val Leu Ser Phe Ser  
                   -10                    -5                    1  
 Thr Arg Leu Phe Ala Val Leu Arg Phe Glu Ser Val Ile His Glu Phe  
                   5                    10                    15  
 Asp Pro Tyr Phe Asn Tyr Arg Thr Thr Arg Phe Leu Ala Glu Glu Gly  
                   20                    25                    30  
 Phe Tyr Lys Phe His Asn Trp Phe Asp Asp Arg Ala Trp Tyr Pro Leu  
 35                    40                    45                    50  
 Gly Arg Ile Ile Gly Gly Thr Ile Tyr Pro Gly Leu Met Ile Thr Ser  
                   55                    60                    65  
 Ala Ala Ile Tyr His Val  
                   70

<210> 4349  
 <211> 234  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -33...-1  
 <223> score 9.5  
       seq LLLGLVMPLAIIA/QV

<400> 4349  
 Met Gly Thr Met Lys Thr Gln Arg Asp Gly His Ser Leu Gly Arg Trp  
                   -30                    -25                    -20  
 Ser Leu Val Leu Leu Leu Leu Gly Leu Val Met Pro Leu Ala Ile Ile  
                   -15                    -10                    -5  
 Ala Gln Val Leu Ser Tyr Lys Glu Ala Val Leu Arg Ala Ile Asp Gly  
                   1                    5                    10                    15  
 Ile Asn Gln Arg Ser Ser Asp Ala Asn Leu Tyr Arg Leu Leu Asp Leu

20 25 30  
 Asp Pro Arg Pro Thr Met Val Ser Phe Gly Gly His Ser Ala  
 35 40 45

<210> 4350  
 <211> 354  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -27...-1  
 <223> score 7.2  
 seq VLWLSGLSEPGAA/RQ

<400> 4350  
 Met Gln Arg Val Ser Gly Leu Leu Ser Trp Thr Leu Ser Arg Val Leu  
 -25 -20 -15  
 Trp Leu Ser Gly Leu Ser Glu Pro Gly Ala Ala Arg Gln Pro Arg Ile  
 -10 -5 1 5  
 Met Glu Glu Lys Ala Leu Glu Val Tyr Asp Leu Ile Arg Thr Ile Arg  
 10 15 20  
 Asp Pro Glu Lys Pro Asn Thr Leu Glu Glu Leu Glu Val Val Ser Glu  
 25 30 35  
 Ser Cys Val Glu Val Gln Glu Ile Asn Glu Xaa Glu Tyr Leu Val Xaa  
 40 45 50  
 Ile Arg Phe Thr Pro Xaa Val Pro His Cys Ser Leu Ala Thr Leu Ile  
 55 60 65  
 Gly Leu Cys Leu Arg Val Lys Leu Gln Arg Cys Leu Pro Phe Lys His  
 70 75 80 85  
 Lys Leu Glu Ile Tyr Ile  
 90

<210> 4351  
 <211> 318  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -24...-1  
 <223> score 10  
 seq LLLLQALPSPLSA/RA

<400> 4351  
 Met Glu Arg Arg Arg Leu Leu Gly Gly Met Ala Leu Leu Leu Gln  
 -20 -15 -10  
 Ala Leu Pro Ser Pro Leu Ser Ala Arg Ala Glu Pro Pro Gln Asp Lys  
 -5 1 5  
 Glu Ala Cys Val Gly Thr Asn Asn Gln Ser Tyr Ile Cys Asp Thr Gly  
 10 15 20  
 His Cys Cys Gly Gln Ser Gln Cys Cys Asn Tyr Tyr Tyr Glu Leu Trp

25 30 35 40  
 Trp Phe Trp Leu Val Trp Thr Ile Ile Ile Ile Leu Ser Cys Cys Cys  
 45 50 55  
 Val Cys His His Arg Arg Ala Lys His Arg Leu Gln Ala Gln Gln Arg  
 60 65 70  
 Gln His Glu Ile Asn Leu Ile Ala Tyr Arg  
 75 80

<210> 4352  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -21..-1  
 <223> score 14.3  
 seq LLCAVLLSLASA/SS

<400> 4352  
 Met Arg Val Arg Ile Gly Leu Thr Leu Leu Leu Cys Ala Val Leu Leu  
 -20 -15 -10  
 Ser Leu Ala Ser Ala Ser Ser Gly Gln Tyr Pro Pro Pro Arg Ala Glu  
 -5 1 5 10  
 Gly Pro Glu Pro Pro Pro Ser Leu Tyr Ser Arg Arg Gly Arg Gly  
 15 20 25  
 Asp Ser Arg  
 30

<210> 4353  
 <211> 432  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -47..-1  
 <223> score 7.1  
 seq SLLFLLMGLRASG/KD

<400> 4353  
 Met Val Ala Pro Lys Ser His Thr Asp Asp Trp Ala Pro Gly Pro Phe  
 -45 -40 -35  
 Ser Ser Lys Pro Gln Arg Ser Gln Leu Gln Ile Phe Ser Ser Val Leu  
 -30 -25 -20  
 Gln Thr Ser Leu Leu Phe Leu Leu Met Gly Leu Arg Ala Ser Gly Lys  
 -15 -10 -5 1  
 Asp Ser Ala Pro Thr Val Val Ser Gly Ile Leu Gly Gly Ser Val Thr  
 5 10 15  
 Leu Pro Leu Asn Ile Ser Val Asp Thr Glu Ile Glu Asn Val Ile Trp  
 20 25 30  
 Ile Gly Pro Lys Asn Ala Leu Ala Phe Ala Arg Pro Lys Glu Asn Val

35		40		45											
Thr	Ile	Met	Val	Lys	Ser	Tyr	Leu	Gly	Arg	Leu	Asp	Ile	Thr	Lys	Trp
50					55					60					65
Ser	Tyr	Ser	Leu	Cys	Ile	Ser	Asn	Leu	Thr	Leu	Asn	Asp	Ala	Gly	Ser
			70					75						80	
Xaa	Lys	Ala	Gln	Ile	Asn	Gln	Xaa	Asn	Phe	Glu	Val	Thr	Thr	Glu	Glu
			85					90					95		

<210> 4354  
 <211> 345  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -26..-1  
 <223> score 10  
 seq LWLALVSCILTQA/SA

<400> 4354															
Met	Pro	His	Leu	Met	Glu	Arg	Met	Val	Gly	Ser	Gly	Leu	Leu	Trp	Leu
-25						-20					-15				
Ala	Leu	Val	Ser	Cys	Ile	Leu	Thr	Gln	Ala	Ser	Ala	Val	Gln	Arg	Asp
-10				-5						1				5	
Pro	Ser	Thr	Val	Glu	Asp	Lys	Cys	Glu	Lys	Ala	Cys	Arg	Pro	Glu	Glu
			10					15					20		
Glu	Cys	Leu	Ala	Leu	Asn	Ser	Thr	Trp	Gly	Cys	Phe	Cys	Arg	Gln	Asp
		25					30					35			
Leu	Asn	Ser	Ser	Asp	Val	His	Ser	Leu	Gln	Pro	Gln	Leu	Asp	Cys	Gly
	40					45					50				
Pro	Arg	Glu	Ile	Lys	Val	Lys	Val	Asp	Lys	Cys	Leu	Leu	Gly	Gly	Leu
55				60						65				70	
Gly	Leu	Gly	Glu	Glu	Val	Met	Pro	Thr	Cys	Glu	Thr	Gln	Leu	Gln	Gln
			75						80					85	
His	Leu	Ala													

<210> 4355  
 <211> 297  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -26..-1  
 <223> score 10  
 seq LWLALVSCILTQA/SA

<400> 4355															
Met	Pro	His	Leu	Met	Glu	Arg	Met	Val	Gly	Ser	Gly	Leu	Leu	Trp	Leu
-25						-20					-15				
Ala	Leu	Val	Ser	Cys	Ile	Leu	Thr	Gln	Ala	Ser	Ala	Val	Gln	Arg	Gly
-10					-5					1				5	



004220"065E7560

Xaa Gly Xaa Pro Ile Glu Ala Ser Met Tyr Gly Leu Asp Leu Asp Ser  
 10 15 20  
 Gly Ala Pro Gly Thr Pro Glu Ala His Val Cys Phe Asp Pro Cys Gln  
 25 30 35  
 Asn Tyr Thr Ile Leu Asp Glu Pro Phe Arg Ser Thr Glu Asn Ser Ala  
 40 45 50  
 Gly Gly Val Arg Xaa Lys His Glu Arg Leu Val Pro Leu Cys Arg Gly  
 55 60 65 70  
 Arg Xaa Ser

<210> 4356  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -15...-1  
 <223> score 6.4  
 seq RLLLSGLSPKALT/LG

<400> 4356  
 Met Cys Arg Leu Leu Leu Ser Gly Leu Ser Pro Lys Ala Leu Thr Leu  
 -15 -10 -5 1  
 Gly Leu Tyr Phe Val Pro Ser Pro Pro Pro Pro Val Thr Gly Leu  
 5 10 15  
 Val Thr Phe Thr Gln Arg Arg Pro His Gln Gly Gly Gly Arg Trp Pro  
 20 25 30  
 Gly Glu Asn  
 35

<210> 4357  
 <211> 276  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -23...-1  
 <223> score 9.1  
 seq GLLAAGFCPAVLC/HP

<400> 4357  
 Met Glu Arg Met Leu Pro Leu Leu Xaa Leu Gly Leu Leu Ala Ala Gly  
 -20 -15 -10  
 Phe Cys Pro Ala Val Leu Cys His Pro Asn Ser Pro Leu Asp Glu Glu  
 -5 1 5  
 Asn Leu Thr Gln Glu Asn Gln Asp Arg Gly Thr His Val Asp Leu Gly  
 10 15 20 25  
 Leu Ala Ser Ala Asn Val Asp Phe Ala Phe Ser Leu Tyr Lys Leu Gly  
 30 35 40  
 Val Arg Leu Arg Asp Arg Gly Val Leu Gly Arg Trp Glu Ala Gln Gly

45 50 55  
 Glu Glu Glu Ser Glu Glu Gly Ile His Cys Gly Gly  
 60 65

<210> 4358  
 <211> 486  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -23...-1  
 <223> score 9.1  
 seq GLLAAGFCPAVLC/HP

<400> 4358  
 Met Glu Arg Met Leu Pro Leu Leu Xaa Leu Gly Leu Leu Ala Ala Gly  
 -20 -15 -10  
 Phe Cys Pro Ala Val Leu Cys His Pro Asn Ser Pro Leu Asp Glu Glu  
 -5 1 5  
 Asn Leu Thr Gln Glu Asn Gln Asp Arg Gly Thr His Val Asp Leu Gly  
 10 15 20 25  
 Leu Ala Ser Ala Asn Val Asp Phe Ala Phe Ser Leu Tyr Lys Gln Leu  
 30 35 40  
 Val Leu Lys Ala Pro Asp Lys Asn Val Ile Phe Ser Pro Leu Ser Ile  
 45 50 55  
 Ser Thr Ala Leu Ala Phe Leu Ser Leu Gly Ala His Asn Thr Thr Leu  
 60 65 70  
 Thr Glu Ile Leu Lys Gly Leu Lys Phe Asn Leu Thr Glu Thr Ser Glu  
 75 80 85  
 Ala Glu Ile His Gln Ser Phe Gln His Leu Leu Arg Thr Leu Asn Gln  
 90 95 100 105  
 Ser Ser Asp Glu Leu Gln Leu Xaa Met Gly Lys Cys His Xaa Cys Xaa  
 110 115 120  
 Arg Ala Thr Gln Ser Ala Gly Gln Val His Gly Gly Cys Gln Glu Ala  
 125 130 135  
 Val Trp

<210> 4359  
 <211> 276  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -23...-1  
 <223> score 9.1  
 seq GLLAAGFCPAVLC/HP

<400> 4359  
 Met Glu Arg Met Leu Pro Leu Leu Thr Leu Gly Leu Leu Ala Ala Gly  
 -20 -15 -10

004220"666ET550

Phe Cys Pro Ala Val Leu Cys His Pro Asn Ser Pro Leu Asp Glu Glu  
 -5 1 5  
 Asn Leu Thr Gln Glu Asn Gln Asp Arg Gly Thr His Val Asp Leu Gly  
 10 15 20 25  
 Leu Ala Ser Ala Asn Val Asp Phe Ala Phe Ser Leu Tyr Lys Leu Gly  
 30 35 40  
 Val Arg Leu Arg Asp Arg Gly Val Leu Gly Arg Trp Glu Ala Gln Gly  
 45 50 55  
 Glu Glu Glu Ser Glu Glu Gly Ile His Cys Gly Gly  
 60 65

<210> 4360  
 <211> 486  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -23...-1  
 <223> score 9.1  
 seq GLLAAGFCPAVLC/HP

<400> 4360  
 Met Glu Arg Met Leu Pro Leu Leu Thr Leu Gly Leu Leu Ala Ala Gly  
 -20 -15 -10  
 Phe Cys Pro Ala Val Leu Cys His Pro Asn Ser Pro Leu Asp Glu Glu  
 -5 1 5  
 Asn Leu Thr Gln Glu Asn Gln Asp Arg Gly Thr His Val Asp Leu Gly  
 10 15 20 25  
 Leu Ala Ser Ala Asn Val Asp Phe Ala Phe Ser Leu Tyr Lys Gln Leu  
 30 35 40  
 Val Leu Lys Ala Pro Asp Lys Asn Val Ile Phe Ser Pro Leu Ser Ile  
 45 50 55  
 Ser Thr Ala Leu Ala Phe Leu Ser Leu Gly Ala His Asn Thr Thr Leu  
 60 65 70  
 Thr Glu Ile Leu Lys Gly Leu Lys Phe Asn Leu Thr Glu Thr Ser Glu  
 75 80 85  
 Ala Glu Ile His Gln Ser Phe Gln His Leu Leu Arg Thr Leu Asn Gln  
 90 95 100 105  
 Ser Ser Asp Glu Leu Gln Leu Xaa Met Gly Lys Cys His Xaa Cys Xaa  
 110 115 120  
 Arg Ala Thr Gln Ser Ala Gly Gln Val His Gly Gly Cys Gln Glu Ala  
 125 130 135  
 Val Trp

<210> 4361  
 <211> 216  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1

<223> score 9.8  
seq LLILQALLPSLA/DG

<400> 4361

Met	Asp	Met	Trp	Thr	Ala	Leu	Leu	Ile	Leu	Gln	Ala	Leu	Leu	Leu	Pro
				-15					-10					-5	
Ser	Leu	Ala	Asp	Gly	Ala	Thr	Pro	Ala	Leu	Arg	Phe	Val	Ala	Val	Gly
		1				5						10			
Asp	Trp	Gly	Gly	Val	Pro	Asn	Ala	Pro	Phe	His	Thr	Ala	Arg	Glu	Met
15					20					25					
Ala	Asn	Ala	Lys	Glu	Ile	Ala	Arg	Thr	Val	Gln	Ile	Leu	Gly	Ala	Asp
30					35					40					45
Phe	Ile	Leu	Ser	Leu	Gly	Asp	Asn								
				50											

<210> 4362

<211> 339

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -45..-1

<223> score 6.8

seq IMVLVVAESVWG/DE

<400> 4362

Met	Asn	Trp	Thr	Gly	Leu	Tyr	Thr	Leu	Leu	Ser	Gly	Val	Asn	Arg	His
-45					-40					-35					-30
Ser	Thr	Ala	Ile	Gly	Arg	Val	Trp	Leu	Ser	Val	Ile	Phe	Ile	Phe	Arg
				-25				-20						-15	
Ile	Met	Val	Leu	Val	Val	Ala	Ala	Glu	Ser	Val	Trp	Gly	Asp	Glu	Lys
			-10					-5					1		
Ser	Ser	Phe	Ile	Cys	Asn	Thr	Leu	Gln	Pro	Gly	Cys	Asn	Ser	Val	Cys
5					10					15					
Tyr	Asp	Gln	Phe	Phe	Pro	Ile	Ser	His	Val	Arg	Leu	Trp	Ser	Leu	Gln
20					25					30					35
Leu	Ile	Leu	Val	Ser	Thr	Pro	Ala	Leu	Leu	Val	Ala	Met	His	Val	Ala
			40					45						50	
His	Gln	Gln	His	Ile	Glu	Lys	Lys	Met	Leu	Arg	Leu	Glu	Gly	Met	Gly
			55					60						65	

Thr

<210> 4363

<211> 171

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -16..-1

<223> score 3.7

seq VVIGAGVIGLSTA/LC

<400> 4363

Met Arg Val Val Val Ile Gly Ala Gly Val Ile Gly Leu Ser Thr Ala  
 -15 -10 -5  
 Leu Cys Ile His Glu Arg Tyr His Ser Val Leu Gln Pro Leu Asp Ile  
 1 5 10 15  
 Lys Val Tyr Ala Asp Arg Phe Thr Xaa Leu Thr Thr Thr Asp Val Ala  
 20 25 30  
 Ala Gly Leu Trp Gln Pro Tyr Xaa Ser  
 35 40

<210> 4364

<211> 363

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -22...-1

<223> score 6.5

seq SLLFLQLPLLGVG/LN

<400> 4364

Met Leu Lys Pro Ser Leu Pro Phe Thr Ser Leu Leu Phe Leu Gln Leu  
 -20 -15 -10  
 Pro Leu Leu Gly Val Gly Leu Asn Thr Thr Ile Leu Thr Pro Asn Gly  
 -5 1 5 10  
 Asn Glu Asp Thr Thr Ala Asp Phe Phe Leu Thr Thr Met Pro Thr Asp  
 15 20 25  
 Ser Leu Ser Val Ser Thr Leu Pro Leu Pro Glu Val Gln Cys Phe Val  
 30 35 40  
 Phe Asn Val Glu Tyr Met Asn Cys Thr Trp Asn Ser Ser Ser Glu Pro  
 45 50 55  
 Gln Pro Thr Asn Leu Thr Leu His Tyr Trp Tyr Lys Asn Ser Asp Asn  
 60 65 70  
 Asp Lys Val Gln Lys Cys Ser His Tyr Leu Phe Ser Glu Glu Ile Thr  
 75 80 85 90  
 Ser Gly Cys Gln Leu Gln Lys Lys Glu  
 95

<210> 4365

<211> 234

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -21...-1

<223> score 8.6

seq FTLCLLLSEMASG/GN

0044220"556ET560

<400> 4365

Met Arg Thr Ser Tyr Leu Leu Leu Phe Thr Leu Cys Leu Leu Leu Ser  
-20 -15 -10  
Glu Met Ala Ser Gly Gly Asn Phe Leu Thr Gly Leu Gly His Arg Ser  
-5 1 5 10  
Asp His Tyr Asn Cys Val Ser Ser Gly Gly Gln Cys Leu Tyr Ser Ala  
15 20 25  
Cys Pro Ile Phe Thr Lys Ile Gln Gly Thr Cys Tyr Glu Gly Arg Pro  
30 35 40  
Ser Ala Ala Ser Glu Leu Gly Val Thr Arg Arg Asn Asp Ala  
45 50 55

<210> 4366

<211> 162

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -18...-1

<223> score 7.7

seq AFLFLLGVLGALT/EM

<400> 4366

Met Arg His Leu Gly Ala Phe Leu Phe Leu Leu Gly Val Leu Gly Ala  
-15 -10 -5  
Leu Thr Glu Met Cys Glu Ile Pro Glu Met Asp Ser His Leu Val Glu  
1 5 10  
Lys Leu Gly Gln His Leu Leu Pro Trp Met Asp Arg Leu Ser Leu Glu  
15 20 25 30  
His Leu Asn Pro Ser Ile  
35

<210> 4367

<211> 213

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -16...-1

<223> score 7.4

seq VVLLSVSLRTEA/HL

<400> 4367

Met Arg Pro Val Val Leu Leu Ser Val Ser Leu Arg Arg Thr Glu Ala  
-15 -10 -5  
His Leu Pro Pro Cys Leu Leu Arg Pro Gly Leu Val Thr Ala Ser Ala  
1 5 10 15  
Glu Glu Ile Thr Thr Ala Leu Glu Phe Ala Ser Leu Leu Gly Ser Ile  
20 25 30

Phe Trp Thr Cys Glu Pro Tyr Ala Phe His Leu Lys Phe Val Ser Lys  
 35 40 45  
 Leu Lys Ile Phe Gly Ser Phe  
 50 55

<210> 4368  
 <211> 426  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -24...-1  
 <223> score 5.3  
 seq CLPVLAAGRARG/RA

<400> 4368  
 Met Arg Leu Phe Val Ser Asp Gly Val Pro Gly Cys Leu Pro Val Leu  
 -20 -15 -10  
 Ala Ala Ala Gly Arg Ala Arg Gly Arg Ala Glu Val Leu Ile Ser Thr  
 -5 1 5  
 Val Gly Pro Glu Asp Cys Val Val Pro Phe Leu Thr Arg Pro Lys Val  
 10 15 20  
 Pro Val Leu Gln Leu Asp Ser Gly Asn Tyr Leu Phe Ser Thr Ser Ala  
 25 30 35 40  
 Ile Cys Arg Tyr Phe Phe Leu Leu Ser Gly Trp Glu Gln Asp Asp Leu  
 45 50 55  
 Thr Asn Gln Trp Leu Glu Trp Glu Ala Thr Glu Leu Gln Pro Ala Leu  
 60 65 70  
 Ser Ala Ala Leu Tyr Tyr Leu Val Val Gln Gly Lys Lys Gly Glu Asp  
 75 80 85  
 Val Leu Gly Ser Xaa Arg Arg Ala Leu Thr His Ile Asp His Ser Leu  
 90 95 100  
 Ser Arg Gln Thr Val Leu Ser Trp Leu Gly Arg Gln Asn Leu  
 105 110 115

<210> 4369  
 <211> 300  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 5.7  
 seq GLLVLTTPPLASLA/PR

<400> 4369  
 Met Ala Val Phe Arg Ser Gly Leu Leu Val Leu Thr Thr Pro Leu Ala  
 -15 -10 -5  
 Ser Leu Ala Pro Arg Leu Ala Ser Ile Leu Thr Ser Ala Ala Arg Leu  
 1 5 10

Val Asn His Thr Leu Tyr Val His Leu Gln Pro Gly Met Ser Leu Glu  
 15 20 25  
 Gly Pro Ala Gln Pro Gln Xaa Ser Pro Val Gln Ala Thr Phe Glu Val  
 30 35 40 45  
 Leu Asp Phe Ile Thr His Leu Tyr Ala Gly Ala Asp Val His Arg His  
 50 55 60  
 Leu Asp Val Arg Ile Leu Leu Thr Asn Ile Arg Thr Lys Ser Thr Phe  
 65 70 75  
 Leu Pro Pro Leu  
 80

<210> 4370  
 <211> 288  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -16...-1  
 <223> score 7.7  
 seq TLLLSLLGAVGLA/AV

<400> 4370  
 Met Gln Pro Thr Leu Leu Leu Ser Leu Leu Gly Ala Val Gly Leu Ala  
 -15 -10 -5  
 Ala Val Asn Ser Met Pro Val Asp Asn Arg Asn His Asn Glu Gly Met  
 1 5 10 15  
 Val Thr Arg Cys Ile Ile Glu Val Leu Ser Asn Ala Leu Ser Lys Ser  
 20 25 30  
 Ser Ala Pro Pro Ile Thr Pro Glu Cys Arg Gln Val Leu Lys Thr Ser  
 35 40 45  
 Arg Lys Asp Val Lys Asp Lys Glu Thr Thr Glu Asn Glu Asn Thr Lys  
 50 55 60  
 Phe Glu Val Arg Leu Leu Arg Asp Pro Ala Asp Ala Thr Glu Ala His  
 65 70 75 80

<210> 4371  
 <211> 276  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -13...-1  
 <223> score 3.8  
 seq MAHCVTLVQLSIS/CD

<400> 4371  
 Met Ala His Cys Val Thr Leu Val Gln Leu Ser Ile Ser Cys Asp His  
 -10 -5 1  
 Leu Ile Asp Lys Asp Ile Gly Ser Lys Ser Asp Pro Leu Cys Val Leu  
 5 10 15



Leu Gln Asp Val Gly Gly Gly Ser Trp Ala Glu Leu Gly Arg Thr Glu  
 20 25 30 35  
 Arg Val Arg Asn Cys Ser Ser Pro Glu Phe Ser Lys Thr Leu Gln Leu  
 40 45 50  
 Glu Tyr Arg Phe Glu Thr Val Gln Lys Leu Arg Phe Gly Ile Tyr Asp  
 55 60 65  
 Ile Asp Asn Lys Thr Pro Glu Leu Arg Asp Asp Asp  
 70 75

<210> 4372  
 <211> 237  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -15..-1  
 <223> score 5.2  
 seq WSCLVTGAGLLG/QR

<400> 4372  
 Met Gly Trp Ser Cys Leu Val Thr Gly Ala Gly Gly Leu Leu Gly Gln  
 -15 -10 -5 1  
 Arg Ile Val Arg Leu Leu Val Glu Glu Lys Glu Leu Lys Glu Ile Arg  
 5 10 15  
 Ala Leu Asp Lys Ala Phe Arg Pro Glu Leu Arg Glu Glu Phe Ser Lys  
 20 25 30  
 Leu Gln Asn Arg Thr Lys Leu Thr Val Leu Glu Gly Asp Ile Leu Asp  
 35 40 45  
 Glu Pro Phe Leu Lys Arg Xaa Cys Gln Asp Val Ser Val Val Ile  
 50 55 60

<210> 4373  
 <211> 396  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -21..-1  
 <223> score 13.2  
 seq VLLLSLFLGGQA/QH

<400> 4373  
 Met Cys Ser Thr Met Arg Ala Leu Val Leu Leu Leu Ser Leu Phe Leu  
 -20 -15 -10  
 Leu Gly Gly Gln Ala Gln His Val Ser Asp Trp Thr Tyr Ser Glu Gly  
 -5 1 5 10  
 Ala Leu Asp Glu Ala His Trp Pro Gln His Tyr Pro Ala Cys Gly Gly  
 15 20 25  
 Gln Arg Gln Ser Pro Ile Asn Leu Gln Arg Thr Lys Val Arg Tyr Asn  
 30 35 40

Pro Ser Leu Lys Gly Leu Asn Met Thr Gly Tyr Glu Thr Gln Ala Gly  
 45 50 55  
 Glu Phe Pro Met Val Asn Asn Gly His Thr Val Gln Ile Ser Leu Pro  
 60 65 70 75  
 Ser Thr Met Arg Met Thr Val Ala Asp Gly Thr Val Tyr Ile Ala Gln  
 80 85 90  
 Gln Met His Phe His Trp Gly Gly Ala Ser Ser Glu Ile Ser Gly Ser  
 95 100 105  
 Glu His Thr Val  
 110

<210> 4374  
 <211> 189  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -20...-1  
 <223> score 5.1  
 seq FILLWSAVGIACA/AK

<400> 4374  
 Met Lys Ser Tyr Thr Pro Tyr Phe Ile Leu Leu Trp Ser Ala Val Gly  
 -20 -15 -10 -5  
 Ile Ala Lys Ala Ala Lys Ile Ile Val Pro Pro Ile Met Phe Glu  
 1 5 10  
 Ser His Met Tyr Ile Phe Lys Thr Leu Ala Ser Ala Leu His Glu Arg  
 15 20 25  
 Gly His His Thr Val Phe Leu Leu Ser Glu Gly Arg Asp Ile Ala  
 30 35 40

<210> 4375  
 <211> 249  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -21...-1  
 <223> score 7.6  
 seq LTPLLCVLHGACP/RA

<400> 4375  
 Met Glu Phe Glu Gly Thr Phe Ser Leu Thr Pro Leu Leu Cys Val Leu  
 -20 -15 -10  
 His Gly Ala Cys Pro Arg Ala Ser Ala Asn Ser Ser Ile Ser Ser His  
 -5 1 5 10  
 Ser Val Leu Gly Thr Ile Pro Gly Leu Cys Trp Arg Asp Glu Thr Ala  
 15 20 25  
 Val Glu Met Lys Thr Gly Cys Arg Gly Trp His Ser Trp Pro Ala Phe  
 30 35 40

Leu His Leu Gly Asn Xaa Pro Thr Pro Arg Thr Leu His Thr Ser Ser  
 45 50 55

Ser His Arg  
 60

<210> 4376  
 <211> 360  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 7.6  
 seq LPVLLVPFLLCQA/LV

<400> 4376  
 Met Ala Arg Lys Ser Asn Leu Pro Val Leu Leu Val Pro Phe Leu Leu  
 -15 -10 -5  
 Cys Gln Ala Leu Val Arg Cys Ser Ser Pro Leu Pro Leu Val Val Asn  
 1 5 10  
 Thr Trp Pro Phe Lys Asn Ala Thr Glu Ala Ala Trp Arg Ala Leu Ala  
 15 20 25  
 Ser Gly Gly Ser Ala Leu Asp Ala Val Glu Ser Gly Cys Ala Met Cys  
 30 35 40 45  
 Glu Arg Glu Gln Cys Asp Gly Ser Val Gly Phe Gly Gly Ser Pro Asp  
 50 55 60  
 Glu Leu Gly Glu Thr Thr Leu Asp Ala Met Ile Met Asp Gly Thr Thr  
 65 70 75  
 Met Asp Val Gly Ala Val Gly Asp Leu Arg Arg Xaa Lys Asn Ala Ile  
 80 85 90  
 Gly Val Ala Arg Lys Val Leu Glu  
 95 100

<210> 4377  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -31...-1  
 <223> score 4.5  
 seq LLSLPSWASLAYS/YL

<400> 4377  
 Met Glu Pro Pro Pro Ala Asp Ser Lys Pro Ala Glu Gly Arg Arg His  
 -30 -25 -20  
 Pro Gly Leu Leu Ser Leu Pro Ser Trp Ala Ser Leu Ala Tyr Ser Tyr  
 -15 -10 -5 1  
 Leu Pro Gly Pro Leu His Ser Cys Leu Gly Gly Pro Tyr Glu Gly Ser  
 5 10 15

Pro Ala Pro Ala Pro  
20

<210> 4378  
<211> 228  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -39...-1  
<223> score 4.8  
seq IILFSAIVGFIYG/YV

<400> 4378  
Met Leu Glu His Leu Ser Ser Leu Pro Thr Gln Met Asp Tyr Lys Gly  
-35 -30 -25  
Gln Lys Leu Ala Glu Gln Met Phe Gln Gly Ile Ile Leu Phe Ser Ala  
-20 -15 -10  
Ile Val Gly Phe Ile Tyr Gly Tyr Val Ala Glu Gln Phe Gly Trp Thr  
-5 1 5  
Val Tyr Ile Val Met Ala Gly Phe Ala Phe Ser Cys Leu Leu Thr Leu  
10 15 20 25  
Pro Pro Trp Pro Ile Tyr Xaa Arg His Pro Leu Lys  
30 35

<210> 4379  
<211> 336  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -41...-1  
<223> score 4.3  
seq RVVSWLFSIVVFG/SI

<400> 4379  
Met Glu Gly Gly Ala Tyr Gly Ala Gly Lys Ala Gly Gly Ala Phe Asp  
-40 -35 -30  
Pro Tyr Thr Leu Val Arg Gln Pro His Thr Ile Leu Arg Val Val Ser  
-25 -20 -15 -10  
Trp Leu Phe Ser Ile Val Val Phe Gly Ser Ile Val Asn Glu Gly Tyr  
-5 1 5  
Leu Asn Ser Ala Ser Glu Gly Glu Glu Phe Cys Ile Tyr Asn Arg Asn  
10 15 20  
Pro Asn Ala Cys Ser Tyr Gly Val Ala Val Gly Val Leu Ala Phe Leu  
25 30 35  
Thr Cys Leu Leu Tyr Leu Ala Leu Asp Val Tyr Phe Pro Gln Ile Ser  
40 45 50 55  
Ser Val Lys Asp Arg Lys Lys Ala Val Leu Ser Asp Ile Gly Val Ser  
60 65 70

<210> 4380  
 <211> 204  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -15...-1  
 <223> score 7  
 seq LLFLLPLVMQGS/RA

<400> 4380  
 Met Ala Leu Leu Phe Leu Leu Pro Leu Val Met Gln Gly Val Ser Arg  
 -15 -10 -5 1  
 Ala Glu Met Gly Thr Ala Asp Leu Gly Pro Ser Ser Val Pro Thr Pro  
 5 10 15  
 Thr Asn Val Thr Ile Glu Ser Tyr Asn Met Asn Pro Ile Val Tyr Trp  
 20 25 30  
 Glu Tyr Gln Ile Met Pro Gln Val Pro Val Phe Thr Val Glu Val Lys  
 35 40 45  
 Asn Tyr Gly Val  
 50

<210> 4381  
 <211> 204  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -33...-1  
 <223> score 11.5  
 seq LLSLCCLLPSCLP/AG

<400> 4381  
 Met Asp Met Met Leu Leu Val Gln Gly Ala Cys Cys Ser Asn Gln Trp  
 -30 -25 -20  
 Leu Ala Ala Val Leu Leu Ser Leu Cys Cys Leu Leu Pro Ser Cys Leu  
 -15 -10 -5  
 Pro Ala Gly Gln Ser Val Asp Phe Pro Trp Ala Ala Val Asp Asn Met  
 1 5 10 15  
 Met Val Arg Lys Gly Asp Thr Ala Val Leu Arg Cys Tyr Leu Glu Asp  
 20 25 30  
 Gly Ala Ser Lys  
 35

<210> 4382  
 <211> 246  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -47...-1  
 <223> score 6.8  
 seq PLGLLRLLQLVST/CV

<400> 4382  
 Met Pro Val Thr Val Thr Arg Thr Thr Ile Thr Thr Thr Thr Ser  
           -45                          -40                          -35  
 Ser Ser Gly Leu Gly Ser Pro Met Ile Val Gly Ser Pro Arg Ala Leu  
       -30                              -25                          -20  
 Thr Gln Pro Leu Gly Leu Leu Arg Leu Leu Gln Leu Val Ser Thr Cys  
   -15                              -10                              -5                              1  
 Val Ala Phe Ser Leu Val Ala Ser Val Gly Ala Trp Thr Gly Ser Met  
                   5                              10                              15  
 Gly Asn Trp Ser Met Phe Thr Trp Cys Phe Cys Phe Ser Val Thr Leu  
           20                              25                              30  
 Ile Ile  
       35

<210> 4383  
 <211> 216  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -15...-1  
 <223> score 11.7  
 seq SLVLLLCCLAQLWG/CH

<400> 4383  
 Met Lys Ser Leu Val Leu Leu Leu Cys Leu Ala Gln Leu Trp Gly Cys  
   -15                              -10                              -5                              1  
 His Ser Ala Pro His Gly Pro Gly Leu Ile Tyr Arg Gln Pro Asn Cys  
           5                              10                              15  
 Asp Asp Pro Glu Thr Glu Glu Ala Ala Leu Val Ala Ile Asp Tyr Ile  
       20                              25                              30  
 Asn Gln Asn Leu Pro Trp Gly Tyr Lys His Thr Leu Asn Gln Ile Asp  
       35                              40                              45  
 Glu Val Lys Val Trp Pro Gln Gln  
   50                              55

<210> 4384  
 <211> 207  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 5.4

0044220"6666T560

seq LSHLLPSLRQVIQ/EP

<400> 4384

Met Ala Met Ala Gln Lys Leu Ser His Leu Leu Pro Ser Leu Arg Gln  
                  -15                  -10                  -5  
Val Ile Gln Glu Pro Gln Leu Ser Leu Gln Pro Glu Xaa Val Phe Thr  
          1                          5                          10  
Val Asp Arg Ala Glu Val Pro Pro Leu Phe Trp Lys Pro Tyr Ile Tyr  
      15                          20                          25  
Ala Gly Xaa Arg Pro Leu His Gln Thr Trp Arg Phe Tyr Phe Arg Thr  
30                          35                          40                          45  
Leu Phe Gln Gln His  
                          50

<210> 4385

<211> 249

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -23...-1

<223> score 7.9

seq LGLWSLCWSLAIA/TP

<400> 4385

Met Ala Arg Val Leu Gly Ala Pro Val Ala Leu Gly Leu Trp Ser Leu  
                  -20                  -15                  -10  
Cys Trp Ser Leu Ala Ile Ala Thr Pro Leu Pro Pro Thr Ser Ala His  
          -5                          1                          5  
Gly Asn Val Ala Glu Gly Glu Thr Lys Pro Asp Pro Asp Val Thr Glu  
10                          15                          20                          25  
Arg Cys Ser Asp Gly Trp Ser Phe Asp Ala Thr Thr Leu Asp Asp Asn  
                          30                          35                          40  
Gly Thr Met Leu Phe Phe Lys Gly Glu Xaa Val Trp Lys Ser His Lys  
          45                          50                          55  
Trp Asp Arg  
          60

<210> 4386

<211> 249

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -19...-1

<223> score 7.6

seq FALFSCFLFGICDA/VT

<400> 4386

Met Ala Gly Ile Phe Tyr Phe Ala Leu Phe Ser Cys Leu Phe Gly Ile  
                     -15                    -10                    -5  
 Cys Asp Ala Val Thr Gly Ser Arg Val Tyr Pro Ala Asn Glu Val Thr  
                     1                    5                    10  
 Leu Leu Asp Ser Arg Ser Val Gln Gly Glu Leu Gly Trp Ile Ala Ser  
           15                    20                    25  
 Pro Leu Glu Gly Gly Trp Glu Glu Val Ser Ile Met Asp Glu Lys Asn  
 30                    35                    40                    45  
 Thr Pro Ile Arg Thr Tyr Leu Gly Gly Cys Cys Phe Glu Gly Ser Tyr  
                     50                    55                    60  
 Ala Tyr Phe

<210> 4387  
 <211> 267  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -39...-1  
 <223> score 11.6  
       seq GLLLLQAVSWASG/AR

<400> 4387  
 Met Glu Phe Ser Ser Pro Ser Arg Glu Glu Cys Pro Lys Pro Leu Ser  
                     -35                    -30                    -25  
 Arg Val Ser Ile Met Ala Gly Ser Leu Thr Gly Leu Leu Leu Leu Gln  
                     -20                    -15                    -10  
 Ala Val Ser Trp Ala Ser Gly Ala Arg Pro Cys Ile Pro Lys Ser Phe  
           -5                    1                    5  
 Gly Tyr Ser Ser Val Val Cys Val Cys Asn Ala Thr Tyr Cys Asp Ser  
 10                    15                    20                    25  
 Phe Asp Pro Pro Thr Phe Pro Ala Leu Gly Thr Phe Ser Arg Tyr Glu  
                     30                    35                    40  
 Ser Thr Arg Ser Gly Asp Gly Trp Ser  
           45                    50

<210> 4388  
 <211> 204  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -37...-1  
 <223> score 5  
       seq PACLSPPHLLSA/AN

<400> 4388  
 Met Ala Asn Arg Tyr Thr Met Asp Leu Thr Ala Ile Tyr Glu Val Ser  
           -35                    -30                    -25  
 Pro Arg Arg Thr Ala Ser Pro Val Pro Ala Cys Leu Ser Pro Ser Pro

004220"666E7560



-20                      -15                      -10  
 His Leu Ser Ser Ala Ala Asn Ser Ser Pro Gly Arg Leu Pro Pro Phe  
 -5                      1                      5                      10  
 Ser Asn Trp Gly Ser Leu Ala Pro Arg Pro Pro Ala Trp Gly Pro Cys  
                     15                      20                      25  
 Leu Pro Leu Arg  
                     30

<210> 4389  
 <211> 408  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -17...-1  
 <223> score 8.7  
       seq RLVCAFLLAACCC/CP

<400> 4389  
 Met Gly Leu Pro Arg Leu Val Cys Ala Phe Leu Leu Ala Ala Cys Cys  
                     -15                      -10                      -5  
 Cys Cys Pro Arg Val Ala Gly Val Pro Gly Glu Ala Glu Gln Pro Ala  
   1                      5                      10                      15  
 Pro Glu Leu Val Glu Val Glu Val Gly Ser Thr Ala Leu Leu Lys Cys  
                     20                      25                      30  
 Gly Leu Ser Gln Ser Gln Gly Asn Leu Ser His Val Asp Trp Phe Ser  
                     35                      40                      45  
 Val His Lys Glu Lys Arg Thr Leu Ile Phe Arg Val Arg Gln Gly Gln  
                     50                      55                      60  
 Gly Gln Ser Glu Pro Gly Glu Tyr Glu Gln Arg Leu Ser Leu Gln Asp  
                     65                      70                      75  
 Arg Gly Ala Thr Leu Ala Leu Thr Gln Val Thr Pro Gln Asp Glu Arg  
 80                      85                      90                      95  
 Ile Phe Leu Cys Xaa Xaa Xaa Ala Pro Ser Val Pro Gly Val Pro His  
                     100                      105                      110  
 Pro Ala Pro Arg Leu Gln Ser Ser  
                     115

<210> 4390  
 <211> 177  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -21...-1  
 <223> score 4  
       seq AACTAAAPLQAHG/AD

<400> 4390  
 Met Met Arg Thr Thr Ala Arg Val Ala Ala Cys Thr Ala Ala Ala Pro

-20                      -15                      -10  
 Leu Gln Ala His Gly Ala Asp Ile Gln Gln Asp Pro Asp Ser Leu Cys  
 -5                      1                      5                      10  
 Ser Arg Arg Leu Ser Arg Glu Gly Leu Ser Ala Xaa Arg Xaa His Gln  
                     15                      20                      25  
 Ser Glu Thr Glu Ala Glu Leu Glu Ala Pro Gly  
                     30                      35

<210> 4391  
 <211> 369  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -20...-1  
 <223> score 3.5  
       seq IVLGTGLTECILS/GI

<400> 4391  
 Met Asp Glu Glu Tyr Asp Val Ile Val Leu Gly Thr Gly Leu Thr Glu  
 -20                      -15                      -10                      -5  
 Cys Ile Leu Ser Gly Ile Met Ser Val Asn Gly Lys Lys Val Leu His  
                     1                      5                      10  
 Met Asp Arg Asn Pro Tyr Tyr Gly Gly Glu Ser Ser Ser Ile Thr Pro  
                     15                      20                      25  
 Leu Glu Glu Leu Tyr Lys Arg Phe Gln Leu Leu Glu Gly Pro Pro Glu  
                     30                      35                      40  
 Ser Met Gly Arg Gly Arg Asp Trp Asn Val Asp Leu Ile Pro Lys Phe  
 45                      50                      55                      60  
 Leu Met Ala Asn Gly Gln Leu Val Lys Met Leu Leu Tyr Thr Glu Val  
                     65                      70                      75  
 Thr Arg Tyr Leu Asp Phe Lys Val Val Glu Gly Ser Phe Val Tyr Lys  
                     80                      85                      90  
 Gly Gly Lys Ile Tyr Lys Val Pro Ser Thr Glu  
                     95                      100

<210> 4392  
 <211> 174  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -25...-1  
 <223> score 12.2  
       seq LLTACALLPFAQG/QT

<400> 4392  
 Met Leu Pro Ala Ala Thr Ala Ser Leu Leu Gly Pro Leu Leu Thr Ala  
 -25                      -20                      -15                      -10  
 Cys Ala Leu Leu Pro Phe Ala Gln Gly Gln Thr Pro Asn Tyr Thr Arg



<210> 4395  
 <211> 255  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -18...-1  
 <223> score 11.9  
 seq ALLFLILANGAQA/FR

<400> 4395  
 Met His Tyr Pro Thr Ala Leu Leu Phe Leu Ile Leu Ala Asn Gly Ala  
                   -15                  -10                  -5  
 Gln Ala Phe Arg Ile Cys Ala Phe Asn Ala Gln Arg Leu Thr Leu Ala  
                   1                  5                  10  
 Lys Val Ala Arg Glu Gln Val Met Asp Thr Leu Val Arg Ile Leu Ala  
 15                  20                  25                  30  
 Arg Cys Asp Ile Met Val Leu Gln Glu Val Val Asp Ser Ser Gly Ser  
                   35                  40                  45  
 Ala Ile Pro Leu Leu Leu Arg Glu Leu Asn Arg Phe Asp Gly Ser Gly  
                   50                  55                  60  
 Pro Tyr Ser Thr Leu  
                   65

<210> 4396  
 <211> 330  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -18...-1  
 <223> score 9.9  
 seq SLLLAALLLLLSG/DG

<400> 4396  
 Met Gly Ala Gly Pro Ser Leu Leu Leu Ala Ala Leu Leu Leu Leu  
                   -15                  -10                  -5  
 Ser Gly Asp Gly Ala Val Arg Cys Asp Thr Pro Ala Asn Cys Thr Tyr  
                   1                  5                  10  
 Leu Asp Leu Leu Gly Thr Trp Val Phe Gln Val Gly Ser Ser Gly Ser  
 15                  20                  25                  30  
 Gln Arg Asp Val Asn Cys Ser Val Met Gly Pro Gln Glu Lys Lys Val  
                   35                  40                  45  
 Val Val Tyr Leu Gln Lys Leu Asp Thr Ala Tyr Asp Asp Leu Gly Asn  
                   50                  55                  60  
 Ser Gly His Phe Thr Ile Ile Tyr Asn Gln Gly Phe Glu Ile Val Leu  
                   65                  70                  75  
 Asn Asp Tyr Lys Trp Phe Ala Phe Phe Lys Tyr Lys Glu Glu  
                   80                  85                  90

<210> 4397  
 <211> 240  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -16..-1  
 <223> score 4.6  
 seq LFPLIFPAEPAQA/SG

<400> 4397  
 Met Asp Glu Leu Phe Pro Leu Ile Phe Pro Ala Glu Pro Ala Gln Ala  
 -15 -10 -5  
 Ser Gly Pro Tyr Val Glu Ile Ile Glu Gln Pro Lys Gln Arg Gly Met  
 1 5 10 15  
 Arg Phe Arg Tyr Lys Cys Glu Gly Arg Ser Ala Gly Ser Ile Pro Gly  
 20 25 30  
 Glu Arg Ser Thr Asp Thr Thr Lys Thr Xaa Pro Xaa Xaa Lys Ile Asn  
 35 40 45  
 Gly Tyr Thr Gly Pro Gly Thr Val Arg Ile Xaa Leu Val Thr Lys Asp  
 50 55 60

<210> 4398  
 <211> 324  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -32..-1  
 <223> score 7.2  
 seq YMLVSLLLIGVAA/WG

<400> 4398  
 Met Val Cys Gly Gly Phe Ala Cys Ser Lys Asn Ala Leu Cys Ala Leu  
 -30 -25 -20  
 Asn Val Val Tyr Met Leu Val Ser Leu Leu Leu Ile Gly Val Ala Ala  
 -15 -10 -5  
 Trp Gly Lys Gly Leu Gly Leu Val Ser Ser Ile His Ile Ile Gly Gly  
 1 5 10 15  
 Val Ile Ala Val Gly Val Phe Leu Xaa Xaa Ile Ala Val Ala Gly Leu  
 20 25 30  
 Val Gly Ala Val Asn His Xaa Gln Val Leu Leu Phe Phe Tyr Met Ile  
 35 40 45  
 Ile Leu Gly Leu Val Phe Ile Phe Gln Phe Val Ile Ser Cys Ser Cys  
 50 55 60  
 Leu Ala Ile Asn Glu Ala Asn Arg Gln Met Ser Ser  
 65 70 75

<210> 4399

<211> 216  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -41...-1  
 <223> score 4.3  
 seq VASFFHLFFRVSA/II

<400> 4399  
 Met Met Thr Leu Lys Met Phe His Cys Phe Asp Ala Glu Glu Glu Thr  
           -40                              -35                              -30  
 Thr Asn Arg Pro Arg Lys Ala Lys Ile Arg His Pro Val Ala Ser Phe  
           -25                              -20                              -15                              -10  
 Phe His Leu Phe Phe Arg Val Ser Ala Ile Ile Val Tyr Leu Leu Cys  
                               -5                              1                              5  
 Gly Leu Leu Ser Ser Ser Phe Ile Thr Cys Met Val Thr Ile Ile Leu  
                               10                              15                              20  
 Leu Leu Ser Cys Asp Phe Trp Ala  
           25                              30

<210> 4400  
 <211> 162  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -29...-1  
 <223> score 3.6  
 seq VMLLVALPCFLQN/CP

<400> 4400  
 Met Tyr Val Ile Val Asp Lys Thr Pro Arg Asp Ser Phe Gln Gln Lys  
                               -25                              -20                              -15  
 Val Met Leu Leu Val Ala Leu Pro Cys Phe Leu Gln Asn Cys Pro Trp  
                               -10                              -5                              1  
 Ser Ser Arg Val Leu Glu Thr Leu Cys Leu Leu Asn Gly Pro Leu Phe  
           5                              10                              15  
 Leu Cys Cys Ala Leu Asp  
           20                              25

<210> 4401  
 <211> 309  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -24...-1  
 <223> score 4.3

004220"666E7560

seq LXFLGMFLSGMVA/QI

<400> 4401

Met Phe Val Ser Xaa Thr Xaa Phe Phe Phe Xaa Leu Xaa Phe Leu Gly  
 -20 -15 -10  
 Met Phe Leu Ser Gly Met Val Ala Gln Ile Asp Ala Asn Trp Asn Phe  
 -5 1 5  
 Leu Asp Phe Ala Tyr His Phe Thr Val Phe Val Phe Tyr Phe Gly Ala  
 10 15 20  
 Phe Leu Leu Glu Ala Ala Thr Ser Leu His Asp Leu His Cys Asn  
 25 30 35 40  
 Thr Thr Ile Thr Xaa Gln Pro Leu Leu Ser Asp Asn Gln Tyr Asn Ile  
 45 50 55  
 Asn Val Ala Ala Ser Ile Phe Ala Phe Met Thr Thr Ala Cys Tyr Gly  
 60 65 70  
 Cys Ser Leu Gly Leu Ala Leu  
 75

<210> 4402

<211> 174

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -19..-1

<223> score 9.6

seq FCILLAAVSGAEG/WG

<400> 4402

Met Met His Leu Arg Leu Phe Cys Ile Leu Leu Ala Ala Val Ser Gly  
 -15 -10 -5  
 Ala Glu Gly Trp Gly Tyr Tyr Gly Cys Xaa Glu Glu Leu Val Gly Pro  
 1 5 10  
 Leu Tyr Ala Arg Ser Leu Gly Ala Ser Ser Tyr Tyr Ser Leu Leu Thr  
 15 20 25  
 Ala Pro Arg Phe Ala Arg Leu His Gly Ile  
 30 35

<210> 4403

<211> 276

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -28..-1

<223> score 5.5

seq FLAIVYFCTIVQG/QV

<400> 4403

004220" 556ET560

Met Lys Ile Phe Gln Arg Lys Met Arg Tyr Trp Leu Xaa Pro Pro Phe  
                   -25                  -20                  -15  
 Leu Ala Ile Val Tyr Phe Cys Thr Ile Val Gln Gly Gln Val Ala Pro  
                   -10                  -5                  1  
 Pro Thr Arg Leu Arg Tyr Asn Val Ile Ser His Asp Ser Ile Gln Ile  
 5                  10                  15                  20  
 Ser Trp Lys Ala Pro Arg Gly Lys Phe Gly Gly Tyr Lys Leu Leu Val  
                   25                  30                  35  
 Thr Pro Thr Ser Gly Gly Lys Thr Asn Gln Leu Asn Leu Gln Asn Thr  
                   40                  45                  50  
 Ala Thr Lys Ala Ile Ile Gln Gly Leu Met Pro Asp  
                   55                  60

<210> 4404  
 <211> 285  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -17..-1  
 <223> score 3.7  
       seq ACLAGWLAWLAWL/AV

<400> 4404  
 Met Ala Trp Leu Ala Cys Leu Ala Gly Trp Leu Ala Trp Leu Ala Trp  
                   -15                  -10                  -5  
 Leu Ala Val Trp Leu Asp Trp Gln Ala Trp Leu Asp Gly Trp Leu Gly  
 1                  5                  10                  15  
 Trp Leu Gly Trp Leu Trp Arg Trp Leu His Gln Val Cys Arg Val Gln  
                   20                  25                  30  
 Cys Pro Val Ala Val Arg Pro Gly Gly Ala Ala Val Met Pro Gly Val  
                   35                  40                  45  
 Gln Trp Gln Asp Ser Ser Thr Phe Pro Gln Ala Ser Ser Val Ala Trp  
 50                  55                  60  
 Leu Gln Phe Gly Leu Ala Ala Ala Ser Pro Leu Phe Leu Leu  
 65                  70                  75

<210> 4405  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -14..-1  
 <223> score 3.8  
       seq LLVSAAPLGFGQG/VW

<400> 4405  
 Met Leu Leu Val Ser Ala Ala Pro Leu Gly Phe Gly Gln Gly Val Trp  
                   -10                  -5                  1

004220"666ET560



Asn Arg Ala Ser Gln Leu Gln Gln Gly Xaa Asp Pro Leu Gly Leu Glu  
5 10 15  
Gly Ala Gly Glu Ala Ser Ala Ser Cys His Arg Leu Leu Val Leu Ala  
20 25 30  
Leu Ala Gln Ala Phe Thr His Thr His Ala His Thr His  
35 40 45

<210> 4406  
<211> 153  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -36...-1  
<223> score 4.4  
seq WLLFCTNQSLSL/PP

<400> 4406  
Met Ser Thr Ser Ala Pro Pro Leu Ser Leu Ile Leu Gly Gly Cys Pro  
-35 -30 -25  
Ile Leu Phe Leu Gln Phe Tyr Trp Leu Leu Phe Cys Thr Asn Gln Ser  
-20 -15 -10 -5  
Leu Ser Leu Ser Pro Pro His Leu Ser Pro Leu Pro Ser Pro Ser Pro  
1 5 10  
Ser Pro Ala  
15

<210> 4407  
<211> 198  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -26...-1  
<223> score 12  
seq LLLALLLPTQIYS/SE

<400> 4407  
Met Gly Arg Ala Met Val Ala Arg Leu Gly Leu Gly Leu Leu Leu Leu  
-25 -20 -15  
Ala Leu Leu Leu Pro Thr Gln Ile Tyr Ser Ser Glu Thr Thr Thr Gly  
-10 -5 1 5  
Thr Ser Ser Asn Ser Ser Gln Ser Thr Ser Asn Ser Gly Leu Ala Pro  
10 15 20  
Asn Pro Thr Asn Ala Thr Thr Lys Ala Ala Gly Gly Ala Leu Gln Ser  
25 30 35  
Thr Ala  
40

<210> 4408

<211> 267  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -40...-1  
 <223> score 6.4  
 seq RGSLLLVAVAGATS/LV

<400> 4408  
 Met Lys Ala Pro Cys Ser Gly Ser Gly Ser Val Ser Met Gly Ala Leu  
 -40 -35 -30 -25  
 Gly Leu Glu Gly Arg Gly Gly Arg Leu Gln Gly Arg Gly Ser Leu Leu  
 -20 -15 -10  
 Leu Ala Val Ala Gly Ala Thr Ser Leu Val Thr Leu Leu Leu Ala Val  
 -5 1 5  
 Pro Ile Thr Val Leu Ala Val Leu Ala Leu Val Pro Gln Asp Gln Gly  
 10 15 20  
 Gly Leu Val Thr Glu Thr Ala Asp Pro Gly Ala Gln Ala Gln Gln Gly  
 25 30 35 40  
 Leu Gly Phe Gln Lys Leu Pro Glu Glu  
 45

<210> 4409  
 <211> 195  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -34...-1  
 <223> score 7.5  
 seq FVFFVFFLRQSLA/LL

<400> 4409  
 Met Ala His Xaa Ala Thr Leu Pro Cys Asp His Val Ser Gln Phe Ser  
 -30 -25 -20  
 Leu Ile Asn Phe Phe Phe Val Phe Phe Val Phe Phe Leu Arg Gln Ser  
 -15 -10 -5  
 Leu Ala Leu Leu Pro Arg Leu Glu Cys Arg Gly Thr Ile Ser Ala His  
 1 5 10  
 Cys Asn Leu His Leu Pro Gly Ser Arg His Ser Pro Ala Ser Ala Pro  
 15 20 25 30  
 Ala

<210> 4410  
 <211> 315  
 <212> PRT  
 <213> Homo sapiens

<220>

<221> SIGNAL  
 <222> -42...-1  
 <223> score 8.1  
 seq LFCFLLLCLSAAS/LL

<400> 4410  
 Met Val Pro Trp Val Arg Thr Met Gly Gln Lys Leu Lys Gln Arg Leu  
           -40                          -35                          -30  
 Arg Leu Asp Val Gly Arg Glu Ile Cys Arg Gln Tyr Pro Leu Phe Cys  
           -25                          -20                          -15  
 Phe Leu Leu Leu Cys Leu Ser Ala Ala Ser Leu Leu Leu Asn Arg Tyr  
           -10                          -5                          1                          5  
 Ile His Ile Leu Met Ile Phe Trp Ser Phe Val Ala Gly Val Val Thr  
                           10                          15                          20  
 Phe Tyr Cys Ser Leu Gly Pro Asp Ser Leu Leu Pro Asn Ile Phe Phe  
                           25                          30                          35  
 Thr Ile Lys Tyr Lys Pro Lys Gln Leu Gly Leu Gln Glu Leu Phe Pro  
           40                          45                          50  
 Gln Gly His Ser Cys Ala Val Cys Gly  
 55                          60

<210> 4411  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -47...-1  
 <223> score 3.5  
 seq CLXFGILASEVYS/WN

<400> 4411  
 Met Tyr His Asn Leu Phe Ala Leu Leu Leu Ile Asp Ile His Val Val  
           -45                          -40                          -35  
 Leu Val Phe Tyr Cys Leu Asp Leu Leu Met Ile His Ile Phe Tyr Cys  
           -30                          -25                          -20  
 Lys Tyr Cys Leu Xaa Phe Gly Ile Leu Ala Ser Glu Val Tyr Ser Trp  
           -15                          -10                          -5                          1  
 Asn Ile Tyr

<210> 4412  
 <211> 216  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -21...-1  
 <223> score 3.5  
 seq WLCVCFVFCVGFL/KK

004220" 666EF560

004220"656T550

<400> 4412

Met Phe Leu Leu Gly Asn Lys Arg Trp Leu Cys Val Cys Val Phe Ser  
 -20 -15 -10  
 Cys Val Gly Phe Leu Lys Lys Trp Glu Glu Glu Lys Lys Ile Leu Arg  
 -5 1 5 10  
 Pro Phe Pro Arg Ser Arg Ser Pro Leu Arg Phe Phe Arg Pro Val Pro  
 15 20 25  
 Pro Pro Phe Phe Val Leu Phe Cys Phe Val Leu Leu Arg Val His Ile  
 30 35 40  
 Pro Val Cys Asn Pro Trp Phe Ala  
 45 50

<210> 4413

<211> 165

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -20...-1

<223> score 7.9  
 seq FLFFIYFLRWSLA/LS

<400> 4413

Met Ala Tyr Leu Val Val Tyr Phe Leu Phe Phe Ile Tyr Phe Leu Arg  
 -20 -15 -10 -5  
 Trp Ser Leu Ala Leu Ser Pro Arg Leu Glu Cys Ser Gly Ala Ile Leu  
 1 5 10  
 Ser His Cys Asn Leu Cys His Leu Gly Xaa Arg Asn Ser Pro Ala Ser  
 15 20 25  
 Ala Tyr Leu Val Ala Gly Cys  
 30 35

<210> 4414

<211> 234

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -36...-1

<223> score 7.2  
 seq FCFFGFFLRQSFA/LV

<400> 4414

Met Pro Ala Phe Phe Pro Ser Phe Ser Ala Leu Pro Tyr Ser Pro Pro  
 -35 -30 -25  
 Ala Leu Pro Gly Phe Phe Val Phe Cys Phe Phe Gly Phe Phe Leu Arg  
 -20 -15 -10 -5  
 Gln Ser Phe Ala Leu Val Ala Gln Ala Gly Val Gln Trp Tyr Asp Ile  
 1 5 10

Ser Gly Leu Gln Pro Pro Pro Pro Arg Phe Lys Arg Leu Ser Tyr Leu  
 15 20 25  
 Ser Leu Pro Ser Ser Trp Ile Thr Gly Met His His Tyr Ala  
 30 35 40

<210> 4415  
 <211> 195  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -45..-1  
 <223> score 4.6  
 seq LIFCIFSRGGVSQ/CW

<400> 4415  
 Met Ala His Cys Ser Leu Asp Phe Pro Gly Ser Ser Asn Ser Cys Ala  
 -45 -40 -35 -30  
 Ser Ala Thr Gln Val Ala Glu Ile Thr Gly Val Cys His His Ala Gln  
 -25 -20 -15  
 Leu Ile Phe Cys Ile Phe Ser Arg Gly Gly Val Ser Gln Cys Trp Leu  
 -10 -5 1  
 Gly Lys Leu Glu Ser Cys Trp Leu Gly Ser Cys Trp Pro Glu Ser Leu  
 5 10 15  
 Asn  
 20

<210> 4416  
 <211> 489  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -28..-1  
 <223> score 4.2  
 seq CLETLAVPSECSA/FS

<400> 4416  
 Met Leu Ile Met Pro Lys Ala Leu Lys Glu Glu Ser Glu Asp Thr Cys  
 -25 -20 -15  
 Leu Glu Thr Leu Ala Val Pro Ser Glu Cys Ser Ala Phe Ser Glu Asn  
 -10 -5 1  
 Ile Glu Asp Pro Gly Glu Gly Pro Ser Asn Pro Cys Leu Asp Thr Ser  
 5 10 15 20  
 Gln Asn Gln Pro Ser Met Glu Ser Glu Met Gly Ala Ala Ala Cys Pro  
 25 30 35  
 Gly Ser Cys Ser Arg Glu Cys Glu Val Ser Phe Ser Ala Ser Asn Pro  
 40 45 50  
 Val Trp Asp Tyr Ser His Leu Met Ser Ser Glu Arg Asn Phe Gln Arg  
 55 60 65

Leu Asp Phe Glu Glu Leu Glu Glu Glu Gly Gln Ala Ser Asp Lys Ser  
 70 75 80  
 Leu Leu Pro Ser Arg Ile Asn Leu Ser Leu Leu Asp Asp Asp Glu Glu  
 85 90 95 100  
 Asp Glu Glu Leu Pro Arg Phe Ile Leu His Tyr Glu Thr His Pro Phe  
 105 110 115  
 Glu Thr Gly Met Ile Val Trp Phe Lys Tyr Gln Lys Tyr Pro Phe Trp  
 120 125 130  
 Xaa Ala Glu  
 135

<210> 4417  
 <211> 231  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -31..-1  
 <223> score 4.5  
 seq VAFGLYNPSLCHA/CT

<400> 4417  
 Met Pro Leu Pro Lys Pro Ser Phe Ser Asn Asn His Leu Ile Arg Leu  
 -30 -25 -20  
 Ile Thr Val Ala Phe Gly Leu Tyr Asn Pro Ser Leu Cys His Ala Cys  
 -15 -10 -5 1  
 Thr Arg Cys Ser Thr Ala Ser Val Ser His Gln Ile Ala His Ser Pro  
 5 10 15  
 Lys Gln Lys Pro Ser Asn Leu Gly Ala Ile Gln Gly Leu Ala Gln Cys  
 20 25 30  
 Leu Val Glu His Met Cys Cys Arg Ile Asn Ile Asp Thr  
 35 40 45

<210> 4418  
 <211> 207  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -32..-1  
 <223> score 3.8  
 seq IRTATLVISLARG/WQ

<400> 4418  
 Met Ala Pro Gly Glu Lys Glu Ser Gly Glu Gly Pro Ala Lys Ser Ala  
 -30 -25 -20  
 Leu Arg Lys Ile Arg Thr Ala Thr Leu Val Ile Ser Leu Ala Arg Gly  
 -15 -10 -5  
 Trp Gln Gln Trp Ala Asn Glu Asn Ser Ile Arg Gln Ala Gln Glu Pro  
 1 5 10 15

Thr Gly Trp Leu Pro Gly Gly Thr Gln Asp Ser Pro Gln Ala Pro Lys  
 20 25 30  
 Pro Ile Thr Pro Arg  
 35

<210> 4419  
 <211> 216  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -36..-1  
 <223> score 6.7  
 seq LELLSSGCLPASA/SQ

<400> 4419  
 Met Glu Ser His Leu Ser Ile Phe Val Phe Leu Val Glu Thr Ser Phe  
 -35 -30 -25  
 Cys His Val Gly Gln Ala Gly Leu Glu Leu Ser Ser Gly Cys Leu  
 -20 -15 -10 -5  
 Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser His Arg  
 1 5 10  
 Thr Gln Pro Asp Trp Leu Lys Lys Ile Phe Leu Ile Lys Lys Arg Lys  
 15 20 25  
 Glu Asn Tyr Ile Glu Lys Gly Arg  
 30 35

<210> 4420  
 <211> 273  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -20..-1  
 <223> score 7.9  
 seq TVTLALVLAVAWA/ME

<400> 4420  
 Met Arg Ala Gly Pro Gly Pro Thr Val Thr Leu Ala Leu Val Leu Ala  
 -20 -15 -10 -5  
 Val Ala Trp Ala Met Glu Leu Lys Pro Thr Ala Pro Pro Ile Phe Thr  
 1 5 10  
 Gly Arg Pro Phe Val Val Ala Trp Asp Val Pro Thr Gln Asp Cys Gly  
 15 20 25  
 Pro Arg Leu Lys Val Pro Leu Asp Leu Asn Ala Phe Asp Val Gln Ala  
 30 35 40  
 Ser Pro Asn Glu Gly Phe Val Asn Gln Asn Ile Thr Ile Phe Tyr Arg  
 45 50 55 60  
 Asp Arg Leu Gly Leu Tyr Pro Arg Phe Asp Ser  
 65 70

<210> 4421  
 <211> 276  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -26...-1  
 <223> score 6.5  
 seq LALGSAGLLWCLA/GF

<400> 4421  
 Met Val Phe Ala Thr Ile Gly Phe Ser Leu Lys Ser Gly Leu Ala Leu  
       -25                      -20                      -15  
 Gly Ser Ala Gly Leu Leu Trp Cys Leu Ala Gly Phe Phe Gly Tyr Asp  
       -10                      -5                      1                      5  
 Thr Gln Gln Pro Thr Ala Pro Asn Ala Ile Glu Gly Tyr Arg Val Met  
               10                      15                      20  
 Ser Ser Phe Gly Val Gly Ala Leu Phe Ala Ala Cys Thr Ile Cys Leu  
           25                      30                      35  
 Leu Ala Xaa Lys Leu Asn Lys Gln Thr Thr Leu Lys Met Ala Asp Asp  
       40                      45                      50  
 Leu Ala Gln Arg Arg Gln Gln Ala Asp Leu Ala Pro  
 55                      60                      65

<210> 4422  
 <211> 171  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -20...-1  
 <223> score 4.3  
 seq FNFLFLVQLCILA/CD

<400> 4422  
 Met Leu Thr Asn Arg Asn Tyr Phe Asn Phe Leu Phe Leu Val Gln Leu  
       -20                      -15                      -10                      -5  
 Cys Ile Leu Ala Cys Asp Asn Ala Tyr Leu Gln Ser Cys Pro Leu Thr  
               1                      5                      10  
 Ser Lys Thr Pro Leu Leu Gln Thr His Ser Ala Leu Phe Tyr Asn Ser  
       15                      20                      25  
 Thr Tyr Gly Ile Phe Leu Leu Leu Gly  
       30                      35

<210> 4423  
 <211> 333  
 <212> PRT  
 <213> Homo sapiens



<220>  
 <221> SIGNAL  
 <222> -28...-1  
 <223> score 9.8  
 seq LLPLSLLVTSIQG/HL

<400> 4423  
 Met Cys Ser Arg Gly Trp Asp Ser Cys Leu Ala Leu Glu Leu Leu Leu  
                   -25                  -20                  -15  
 Leu Pro Leu Ser Leu Leu Val Thr Ser Ile Gln Gly His Leu Val His  
                   -10                  -5                  1  
 Met Thr Val Val Ser Gly Ser Asn Val Thr Leu Asn Ile Ser Glu Ser  
 5                  10                  15                  20  
 Leu Pro Glu Asn Tyr Lys Gln Leu Thr Trp Phe Tyr Thr Phe Asp Gln  
                   25                  30                  35  
 Lys Ile Val Glu Trp Asp Ser Arg Xaa Ser Lys Tyr Phe Glu Ser Lys  
                   40                  45                  50  
 Phe Lys Gly Arg Val Arg Leu Asp Pro Gln Ser Gly Ala Leu Tyr Ile  
                   55                  60                  65  
 Ser Lys Val Gln Lys Glu Asp Asn Ser Xaa Tyr Ile Met Arg Val  
                   70                  75                  80

<210> 4424  
 <211> 168  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 4.8  
 seq ATYLVQSSACCPA/IV

<400> 4424  
 Met Ala Ser Pro Ala Ala Ala Thr Tyr Leu Val Gln Ser Ser Ala Cys  
                   -15                  -10                  -5  
 Cys Pro Ala Ile Val Arg His Leu Cys Gln Xaa Tyr Arg Ser Met Pro  
                   1                  5                  10  
 Val Phe Leu Asp Pro Ala Xaa Ile Ala Thr Leu Glu Gly Ile Ser Trp  
                   15                  20                  25  
 Arg Leu Pro Ser Ala Pro Ser Asp  
 30                  35

<210> 4425  
 <211> 192  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -14...-1  
 <223> score 4.4

004220"666E7550

seq HIFFLSFFIETDS/HS

<400> 4425

```

Met His Ile Phe Phe Leu Ser Phe Phe Ile Glu Thr Asp Ser His Ser
              -10              -5              1
Val Ala Gln Ala Gly Val Gln Xaa Arg Asp Leu Gly Ser Leu Gln Ala
      5              10              15
Pro Leu Pro Gly Phe Thr Pro Phe Ser Cys Xaa Ser Leu Pro Ser Ser
  20              25              30
Trp Asp Tyr Arg Cys Pro Xaa Pro Cys Pro Ala Asn Phe Phe Cys Ile
  35              40              45              50

```

<210> 4426

<211> 345

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -23...-1

<223> score 3.7

seq FLPLXRAFACRG/CQ

<400> 4426

```

Met Val Val Leu Arg Ala Gly Lys Lys Thr Phe Leu Pro Pro Leu Xaa
      -20              -15              -10
Arg Ala Phe Ala Cys Arg Gly Cys Gln Leu Ala Pro Glu Arg Gly Ala
      -5              1              5
Glu Arg Arg Asp Thr Ala Pro Ser Gly Val Ser Arg Phe Cys Pro Pro
  10              15              20              25
Arg Lys Ser Cys His Asp Trp Ile Gly Pro Pro Asp Lys Tyr Ser Asn
      30              35              40
Leu Arg Pro Val His Phe Tyr Ile Pro Glu Asn Glu Ser Pro Leu Glu
      45              50              55
Gln Lys Leu Arg Lys Leu Arg Gln Glu Thr Gln Glu Trp Asn Gln Gln
      60              65              70
Phe Trp Ala Asn Gln Asn Leu Thr Phe Ser Lys Glu Lys Glu Glu Phe
      75              80              85
Ile His Ser
  90

```

<210> 4427

<211> 165

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -34...-1

<223> score 3.8

seq RWASSCLHPSARS/SN

004220" 666E560

<400> 4427

Met Glu Ala Ala Thr Thr Leu His Pro Gly Pro Arg Pro Ala Leu Pro  
                  -30                  -25                  -20  
Leu Gly Ala Arg Ala Arg Trp Ala Ser Ser Cys Leu His Pro Ser Ala  
                  -15                  -10                  -5  
Arg Ser Ser Asn Pro Ala Gly Lys Ser Ser Arg Thr Pro Xaa Leu Ser  
          1                  5                  10  
Ser Thr Arg Ser Gly Pro Gly  
15                  20

<210> 4428

<211> 306

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -37...-1

<223> score 8.5

seq LLVLLLYAPVGFC/LL

<400> 4428

Met Glu Leu Pro Ser Gly Pro Gly Pro Glu Arg Leu Phe Asp Ser His  
          -35                  -30                  -25  
Arg Leu Pro Gly Asp Cys Phe Leu Leu Leu Val Leu Leu Leu Tyr Ala  
          -20                  -15                  -10  
Pro Val Gly Phe Cys Leu Leu Val Leu Xaa Leu Phe Leu Gly Ile His  
          -5                  1                  5                  10  
Val Phe Leu Val Ser Cys Ala Leu Pro Asp Ser Val Leu Arg Arg Phe  
          15                  20                  25  
Val Val Arg Thr Met Cys Ala Val Leu Gly Leu Val Ala Arg Gln Glu  
          30                  35                  40  
Asp Ser Gly Leu Arg Asp His Ser Val Arg Val Leu Ile Ser Asn His  
          45                  50                  55  
Val Thr Pro Phe Asp His  
60                  65

<210> 4429

<211> 183

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -20...-1

<223> score 10.5

seq PLALCLLAAPASA/LV

<400> 4429

Met Gln Pro Ser Ser Leu Leu Pro Leu Ala Leu Cys Leu Leu Ala Ala  
-20                  -15                  -10                  -5

Pro Ala Ser Ala Leu Val Arg Ile Pro Leu His Lys Phe Thr Ser Ile  
                   1                  5                  10  
 Arg Arg Thr Met Ser Glu Val Gly Gly Ser Val Glu Asp Leu Ile Ala  
           15                  20                  25  
 Lys Gly Pro Ser His Thr His Pro His Thr Arg Pro Pro  
       30                  35                  40

<210> 4430

<211> 156

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -25...-1

<223> score 6.5

seq LGSLSXVWPAPW/CR

<400> 4430

Met Ala His Leu Gly Ala Glu Ser Gln Ala Ser Ser Leu Gly Ser Leu  
 -25                  -20                  -15                  -10  
 Ser Xaa Xaa Val Trp Pro Ala Trp Pro Cys Arg Ser Pro Met Lys Ala  
                   -5                  1                  5  
 Thr Pro Trp Ser Asp Gly His Glu Ala Ser Xaa Xaa Pro Trp Gln Lys  
       10                  15                  20  
 Thr Glu Ser Ala  
       25

<210> 4431

<211> 159

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -14...-1

<223> score 3.8

seq YCFFAKFVSLSHS/LP

<400> 4431

Met Tyr Cys Phe Phe Ala Lys Phe Val Ser Leu Ser His Ser Leu Pro  
                   -10                  -5                  1  
 Asp Glu Lys His Pro Leu Phe Thr Arg Lys Ser Lys Pro Arg Val Ser  
       5                  10                  15  
 Pro Gln Thr Phe Pro Thr Tyr Thr Ser Met Ser Phe Leu Pro Ser Pro  
       20                  25                  30  
 Pro Val Gln Pro Gln  
       35

<210> 4432

<211> 300

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -16...-1

<223> score 10.9

seq RVLLLTALTLCCHG/FN

<400> 4432

Met Ala Leu Arg Val Leu Leu Leu Thr Ala Leu Thr Leu Cys His Gly  
-15 -10 -5  
Phe Asn Leu Asp Thr Glu Asn Ala Met Thr Phe Gln Glu Asn Ala Arg  
1 5 10 15  
Gly Phe Gly Gln Ser Val Val Gln Leu Gln Gly Ser Arg Val Val Val  
20 25 30  
Gly Ala Pro Gln Glu Ile Val Ala Ala Asn Gln Arg Gly Ser Leu Tyr  
35 40 45  
Gln Cys Asp Tyr Ser Thr Gly Ser Cys Glu Pro Ile Arg Leu Gln Val  
50 55 60  
Pro Val Glu Ala Val Asn Met Ser Leu Gly Leu Ser Leu Ala Ala Thr  
65 70 75 80  
Thr Ser Pro Pro

<210> 4433

<211> 324

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -20...-1

<223> score 8.4

seq FSLTVLFLRQSFA/HV

<400> 4433

Met Ser Arg Thr Gln Leu Gln Phe Ser Leu Thr Val Leu Phe Leu Arg  
-20 -15 -10 -5  
Gln Ser Phe Ala His Val Thr Gln Ala Gly Val Gln Trp His Gly Leu  
1 5 10  
Gly Ser Leu Gln Pro Pro Pro Pro Arg Phe Lys Leu Leu Ser Cys Leu  
15 20 25  
Ser Pro Gln Val Gly Gly Ile Thr Gly Thr Cys His His Ala Gln Leu  
30 35 40  
Ile Phe Val Phe Leu Ile Glu Met Gly Phe His His Val Gly Gln Ala  
45 50 55 60  
Gly Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Thr Ser Ala Ser Gln  
65 70 75  
Pro Ala Gly Ile Ile Gly Met Asn His His Ala Gln  
80 85

<210> 4434

<211> 168

<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -20..-1  
<223> score 8.4  
seq FSLTVLFLRQSFA/HV

<400> 4434  
Met Ser Arg Thr Gln Leu Gln Phe Ser Leu Thr Val Leu Phe Leu Arg  
-20 -15 -10 -5  
Gln Ser Phe Ala His Val Thr Gln Ala Gly Val Gln Xaa Ala Trp Ser  
1 5 10  
Trp Ile Thr Xaa Thr Ser Thr Ser Gln Val Gln Ala Ile Val Leu Pro  
15 20 25  
Gln Pro Pro Ser Arg Trp Asp Thr  
30 35

<210> 4435  
<211> 261  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -23..-1  
<223> score 4.6  
seq LELLTSGGSPASA/SQ

<400> 4435  
Met Gly Phe Leu His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser  
-20 -15 -10  
Gly Gly Ser Pro Ala Ser Ala Ser Gln Asn Ala Gly Ile Thr Gly Met  
-5 1 5  
Ser His Arg Thr Trp Pro His Phe Leu Phe Leu Ile Gln Asn Leu Thr  
10 15 20 25  
Leu Ser Pro Arg Leu Glu Tyr Ser Gly Ala Val Ser Ala His Cys Asn  
30 35 40  
Phe Cys Leu Trp Asn Ser Ser Ser His Leu Ser Leu Leu Ser Ser Trp  
45 50 55  
Asp Tyr Arg Tyr Val Pro Pro  
60

<210> 4436  
<211> 186  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -25..-1

<223> score 4  
seq LLQELGLCMCLLS/AE

<400> 4436

Met	Ser	His	Cys	Ala	Gln	Pro	Lys	Ala	Cys	Pro	Glu	Leu	Leu	Gln	Glu
-25					-20					-15					-10
Leu	Gly	Leu	Cys	Met	Cys	Leu	Leu	Ser	Ala	Glu	Pro	Ser	Leu	His	Pro
			-5					1					5		
Trp	Arg	Trp	Leu	Arg	Pro	Leu	His	Thr	His	Asn	Leu	Leu	Gly	Pro	Pro
	10					15						20			
Gly	Glu	Val	Phe	Phe	Pro	Phe	Leu	Ser	Ala	Lys	Pro	Pro	Leu		
25						30					35				

<210> 4437

<211> 174

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -29...-1

<223> score 5.9  
seq FSYISXFLSPVCG/CS

<400> 4437

Met	Lys	Cys	Leu	Lys	Val	Asn	Pro	Phe	Leu	Phe	Leu	Val	Phe	Asn	Phe
			-25					-20						-15	
Phe	Ser	Tyr	Ile	Ser	Xaa	Phe	Leu	Ser	Pro	Val	Cys	Gly	Cys	Ser	Val
		-10				-5					1				
Cys	Asn	Leu	Lys	His	Trp	Glu	Asn	Glu	Leu	Leu	Phe	Pro	Ser	Pro	His
5					10					15					
Phe	Leu	Pro	Tyr	Lys	Phe	Xaa	Phe	Leu	Phe						
20					25										

<210> 4438

<211> 249

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -36...-1

<223> score 7.4  
seq LCLLGSSDSPASA/SR

<400> 4438

Met	Gly	Gly	Trp	Ile	Leu	Ala	Leu	Ser	Ser	Lys	Leu	Glu	Cys	Ser	Ser
-35					-30					-25					
Xaa	Ile	Leu	Ala	His	Cys	Asn	Leu	Cys	Leu	Leu	Gly	Ser	Ser	Asp	Ser
-20			-15					-10						-5	
Pro	Ala	Ser	Ala	Ser	Arg	Val	Ala	Gly	Ile	Thr	Gly	Met	Cys	His	His

004220"666ET560

1 5 10  
 Ala Trp Leu Ile Phe Val Phe Leu Val Glu Met Gly Phe His His Val  
 15 20 25  
 Ser Gln Ser Gly Leu Lys Leu Leu Thr Ser Ser Asn Leu Pro Ala Ser  
 30 35 40  
 Ala Ser His  
 45

<210> 4439  
 <211> 177  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19..-1  
 <223> score 8.2  
 seq QVLALVLVAALWG/GT

<400> 4439  
 Met Ala Ala Ser Leu Gly Gln Val Leu Ala Leu Val Leu Val Ala Ala  
 -15 -10 -5  
 Leu Trp Gly Gly Thr Gln Pro Leu Lys Arg Ala Ser Ala Gly Leu  
 1 5 10  
 Gln Arg Val His Glu Pro Thr Trp Ala Gln Gln Leu Leu Gln Glu Met  
 15 20 25  
 Lys Thr Leu Phe Leu Asn Thr Glu Tyr Leu Met  
 30 35 40

<210> 4440  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -24..-1  
 <223> score 3.8  
 seq XVFXFXFLXRXLX/XX

<400> 4440  
 Met Ile Ser Asn Gly Lys Phe Phe Cys Phe Phe Xaa Val Phe Xaa Phe  
 -20 -15 -10  
 Xaa Phe Leu Xaa Arg Xaa Leu Xaa Xaa Xaa Pro Arg Leu Glu Cys Asn  
 -5 1 5  
 Gly Lys Xaa Ser Ala His Xaa Asn Leu Arg Leu Leu Ser Xaa Ser Asn  
 10 15 20  
 Ser Leu Ala Ser Ala Pro Arg  
 25 30

<210> 4441  
 <211> 156

004220 6667560



<212> PRT  
 <213> Homo sapiens  
 <220>  
 <221> SIGNAL  
 <222> -37...-1  
 <223> score 4.3  
 seq LELMASSDLPASA/SQ

<400> 4441  
 Met Arg His His Thr Gln Leu Ile Phe Val Phe Leu Val Glu Met Gly  
           -35                          -30                          -25  
 Phe His Tyr Ile Gly Gln Ala Asp Leu Glu Leu Met Ala Ser Ser Asp  
           -20                          -15                          -10  
 Leu Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Thr Thr  
           -5                          1                          5                          10  
 Met Pro Arg Arg  
                           15

<210> 4442  
 <211> 156  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -22...-1  
 <223> score 4.4  
 seq LVIPALWEAEVGG/SP

<400> 4442  
 Met Phe Gly Arg Ala Trp Trp Leu Met Leu Val Ile Pro Ala Leu Trp  
           -20                          -15                          -10  
 Glu Ala Glu Val Gly Gly Ser Pro Glu Leu Thr Ser Ser Ser Asn Pro  
           -5                          1                          5                          10  
 Ser Val Ser Ala Ser Xaa Ser Ala Gly Ile Ala Gly Met Ser His His  
                           15                          20                          25  
 Ala Gln Thr Leu  
                           30

<210> 4443  
 <211> 162  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -34...-1  
 <223> score 9.2  
 seq VVVVCLFLRQSLA/LS

004220" 666E560

<400> 4443  
 Met Val Leu Tyr Leu Phe Val Phe Ile Phe Ile His Leu Asn Leu Phe  
                   -30                  -25                  -20  
 Phe Ser Gly Ser Phe Val Val Val Val Cys Leu Phe Leu Arg Gln Ser  
                   -15                  -10                  -5  
 Leu Ala Leu Ser His Arg Leu Lys Cys Ser Gly Met Ile Ser Ala His  
           1                  5                  10  
 Cys Asn Leu Cys Leu Pro  
 15                  20

<210> 4444  
 <211> 156  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -37..-1  
 <223> score 4.3  
       seq LELMASSDLPASA/SQ

<400> 4444  
 Met Arg His His Thr Gln Leu Ile Phe Val Phe Leu Val Glu Met Gly  
           -35                  -30                  -25  
 Phe His Tyr Ile Gly Gln Ala Asp Leu Glu Leu Met Ala Ser Ser Asp  
           -20                  -15                  -10  
 Leu Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Xaa Thr  
           -5                  1                  5                  10  
 Met Pro Arg Arg  
                   15

<210> 4445  
 <211> 231  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -39..-1  
 <223> score 4.2  
       seq SLALASLRLGITG/TR

<400> 4445  
 Met Leu Leu Ser Pro Arg Leu Glu Cys Ser Asp Ala Ile Ser Ala His  
                   -35                  -30                  -25  
 Cys Asn Leu Arg Leu Leu Gly Ser Asn Asp Ser Leu Ala Leu Ala Ser  
                   -20                  -15                  -10  
 Leu Arg Leu Gly Ile Thr Gly Thr Arg Arg His Pro Trp Leu Ile Phe  
           -5                  1                  5  
 Val Phe Leu Val Glu Thr Xaa Phe Arg His Val Ser Gln Ala Gly Leu  
 10                  15                  20                  25  
 Glu Leu Leu Thr Ser Gly Asp Pro Pro Thr Ser Ala Ser

30

35

<210> 4446  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -32...-1  
 <223> score 4.7  
 seq FVCLFVFKTESHS/VT

<400> 4446  
 Met Thr Phe Lys Thr Pro Gln Asn Gln Glu Arg Thr Ala Leu Pro Gln  
           -30                  -25                  -20  
 Phe Cys Phe Phe Val Cys Leu Phe Val Phe Lys Thr Glu Ser His Ser  
           -15                  -10                  -5  
 Val Thr Gln Ala Gly Val Gln Trp Cys Asp Leu Gly Ser Leu Gln Pro  
 1                          5                  10                  15  
 Leu Pro Pro Gly Phe  
                           20

<210> 4447  
 <211> 171  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -43...-1  
 <223> score 4.5  
 seq LELLTSGDPPALA/SQ

<400> 4447  
 Met His His His Ala Trp Leu Phe Ile Tyr Leu Phe Leu Phe Leu Phe  
           -40                  -35                  -30  
 Phe Phe Ser Arg Asp Arg Phe Phe His Val Gly Gln Ala Gly Leu Glu  
           -25                  -20                  -15  
 Leu Leu Thr Ser Gly Asp Pro Pro Ala Leu Ala Ser Gln Thr Ala Gly  
           -10                  -5                  1                  5  
 Ile Ile Gly Met Ser His Arg Ala Arg  
                           10

<210> 4448  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -33...-1

<223> score 5.5  
seq SLCLLTVAVLVLT/FK

<400> 4448  
Met Gly Lys Lys Lys Ile Trp Thr Pro Ser Ser Tyr Pro Met Pro Ser  
                  -30                  -25                  -20  
His Lys His Val Ser Leu Cys Leu Leu Thr Val Ala Val Leu Val Leu  
          -15                  -10                  -5  
Thr Phe Lys Ser Leu Ile His Phe Glu Xaa Ile Phe Ala Tyr Glu Ile  
      1                  5                  10                  15  
Gly Val Gln

<210> 4449  
<211> 210  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -35...-1  
<223> score 6.3  
seq LFFLDGVSLRAQA/GV

<400> 4449  
Met Ser His His Ala Arg Pro Val Met Pro Phe Cys Phe Ile Phe Phe  
-35                  -30                  -25                  -20  
Val Phe Gln Ile Phe Phe Leu Phe Phe Leu Asp Gly Val Ser Leu Arg  
                  -15                  -10                  -5  
Ala Gln Ala Gly Val Gln Trp His Asp Ile Gly Ser Leu Xaa Xaa Pro  
          1                  5                  10  
Pro Pro Trp Phe Lys Gln Phe Ala Cys Leu Ser Leu Pro Ser Ser Trp  
      15                  20                  25  
Asp Tyr Xaa Arg Thr Pro  
30                  35

<210> 4450  
<211> 159  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -13...-1  
<223> score 4.9  
seq MVVCACSSSCLRG/LR

<400> 4450  
Met Val Val Cys Ala Cys Ser Ser Ser Cys Leu Arg Gly Leu Arg Arg  
                  -10                  -5                  1  
Glu Asn His Leu Asn Leu Gly Ser Gly Ser His Ser Glu Pro Arg Ser  
      5                  10                  15

0044220" 666ET560

Cys His Tyr Thr Ser Xaa Xaa Gly Xaa Gln Asn Glu Thr Pro Ser Gln  
 20 25 30 35

Lys Lys Lys Lys Lys  
 40

<210> 4451  
 <211> 162  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -43...-1  
 <223> score 3.7  
 seq VWCLXLKLVPALC/IS

<400> 4451  
 Met Arg Gly Trp Xaa Ala Pro Ala Trp Arg Xaa Leu Xaa Thr Arg Arg  
 -40 -35 -30  
 Leu Pro Met Gly Ser Arg His Gly Ala Ser Pro Ala Ser Ala Val Trp  
 -25 -20 -15  
 Cys Leu Xaa Leu Lys Leu Val Pro Ala Leu Cys Ile Ser Gly Leu Thr  
 -10 -5 1 5  
 Leu Gly Ile Gln Gly Phe  
 10

<210> 4452  
 <211> 162  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -35...-1  
 <223> score 8.7  
 seq LLLSVAFNQLVFA/LY

<400> 4452  
 Met Asp Phe Thr Gln Cys His Ser Leu Leu Leu Arg Val Glu Tyr Ser  
 -35 -30 -25 -20  
 Pro Val Ser Val Cys Phe Leu Leu Leu Ser Val Ala Phe Asn Gln Leu  
 -15 -10 -5  
 Val Phe Ala Leu Tyr Pro Ile Gln Ala Thr Xaa Cys Phe Ser Xaa Val  
 1 5 10  
 Ser Leu Pro Phe Pro Ala  
 15

<210> 4453  
 <211> 177  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -40...-1  
 <223> score 3.5  
 seq SLAHCSLCLPGSS/DS

<400> 4453  
 Met Val Met Leu Met Leu Ile Tyr Ile Tyr Xaa Xaa Xaa Arg Ser Leu  
 -40 -35 -30 -25  
 Ala Leu Leu Xaa Arg Leu Glu Trp Gln Asp Leu Ser Leu Ala His Cys  
 -20 -15 -10  
 Ser Leu Cys Leu Pro Gly Ser Ser Asp Ser Pro Ala Ser Ala Ser Trp  
 -5 1 5  
 Val Ala Glu Ile Ile Gly Met His His His Ala  
 10 15

<210> 4454  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -15...-1  
 <223> score 5.4  
 seq LLEALAPSGGSRG/KK

<400> 4454  
 Met Lys Leu Leu Glu Ala Leu Ala Pro Ser Gly Gly Ser Arg Gly Lys  
 -15 -10 -5 1  
 Lys Tyr Val Ser Leu Thr Phe Gln Pro Xaa Gln Ala His Ser Ile Pro  
 5 10 15  
 Ala Cys Ser Pro Met Ser Cys His Leu Ser Ser Trp Cys Cys His Cys  
 20 25 30  
 His Asn Ala Phe Phe Leu Thr Leu Ser Phe Leu Ala Ser  
 35 40 45

<210> 4455  
 <211> 186  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -17...-1  
 <223> score 3.6  
 seq VIFVSLXXYSIYS/RX

<400> 4455  
 Met Ile Xaa Xaa Val Ile Phe Val Ser Leu Xaa Xaa Tyr Ser Ile Tyr  
 -15 -10 -5

Ser Arg Xaa Phe Xaa Val Xaa Phe Ser Xaa Gln Ser Phe Ala Leu Val  
 1 5 10 15  
 Thr Arg Leu Glu Xaa Asn Gly Thr Ile Ser Ala His Cys Asn Leu His  
 20 25 30  
 Leu Xaa Gly Ser Ser Asp Ser Pro Ala Ser Ala Ser Gln Val  
 35 40 45

<210> 4456  
 <211> 156  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -48...-1  
 <223> score 5  
 seq VVVVVSSSPCVPG/EV

<400> 4456  
 Met Asp Ser Ile Thr Pro Glu Leu Lys Lys His His Lys Phe Ser Gly  
 -45 -40 -35  
 Ser Thr Leu Asp Gly Leu Val Gln Lys His Trp Gly Asn Gly Phe Trp  
 -30 -25 -20  
 Glu Phe Val Val Val Val Val Ser Ser Ser Pro Cys Val Pro Gly  
 -15 -10 -5  
 Glu Val Ala Val  
 1

<210> 4457  
 <211> 252  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -23...-1  
 <223> score 4.5  
 seq LELLTSGDPPALA/SQ

<400> 4457  
 Met Gly Phe His His Val Ser Gln Ala Gly Leu Glu Leu Leu Thr Ser  
 -20 -15 -10  
 Gly Asp Pro Pro Ala Leu Ala Ser Gln Ser Ala Gly Ile Thr Asp Val  
 -5 1 5  
 Ser His Arg Ala Arg Pro Gln Asn Lys Asn Val Glu Asn Ile Asp Phe  
 10 15 20 25  
 Gly Gly Ser Ile Leu Thr Thr Ile Phe Leu Arg Glu Lys Leu Gln Leu  
 30 35 40  
 Phe Leu Leu Leu Arg Val His Leu Leu Lys Cys Pro Val Gly Ile Ile  
 45 50 55  
 Val Gln Asn His  
 60

<210> 4458  
 <211> 189  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -23...-1  
 <223> score 5.4  
 seq LELLTSTDPPASA/SQ

<400> 4458  
 Met Gly Phe His His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser  
                   -20                  -15                  -10  
 Thr Asp Pro Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Cys Val  
                   -5                  1                  5  
 Xaa His Cys Ala Pro Pro Phe Cys Phe Val Tyr Glu Phe Asp Cys Ser  
 10                  15                  20                  25  
 Gly Tyr Leu Thr Lys Ala Glu Leu Val Gly Arg Ser Gly Ser Arg  
                   30                  35                  40

<210> 4459  
 <211> 222  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -31...-1  
 <223> score 4  
 seq FLSFLKILRQGLA/LS

<400> 4459  
 Met Cys Ser Ile Phe Leu Thr Lys Ile Glu Ile Ser His Leu Leu Leu  
           -30                  -25                  -20  
 Gly Ile Phe Leu Ser Phe Leu Lys Ile Leu Arg Gln Gly Leu Ala Leu  
 -15                  -10                  -5                  1  
 Ser Leu Arg Leu Glu Cys Arg Gly Ala Ile Met Ala Gln Cys Asn Ile  
           5                  10                  15  
 His Leu Pro Gly Ser Ser Asp Pro Ala Pro Ser Pro Ser Gly Val Xaa  
           20                  25                  30  
 Gly Pro Gln Val Arg Thr Thr Met Pro Gly  
           35                  40

<210> 4460  
 <211> 219  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL

004220" 666ET560



<222> -33...-1  
 <223> score 8.1  
 seq LFCFVLFCFVLFC/FV

<400> 4460  
 Met Ala Thr Val Thr Arg Ile Pro Cys Glu Cys Gln Leu Leu Val Leu  
                   -30                  -25                  -20  
 His Trp Cys Val Leu Phe Cys Phe Val Leu Phe Cys Phe Val Leu Phe  
                   -15                  -10                  -5  
 Cys Phe Val Leu Phe Glu Thr Gly Ser Gln Ser Val Ala Gln Ala Gly  
       1                  5                  10                  15  
 Val Gln Ser Cys Asp Leu Cys Ser Leu Gln Pro Pro Pro Pro Gly Leu  
                   20                  25                  30  
 Lys Arg Phe Ser Gln Leu Ser Leu Pro  
           35                  40

<210> 4461  
 <211> 243  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -40...-1  
 <223> score 4.4  
 seq LNLGVLMCIECSG/IH

<400> 4461  
 Met Ala Leu Gln Ser Ile Gln Asn Met Arg Gly Asn Ser His Cys Val  
       -40                  -35                  -30                  -25  
 Asp Cys Glu Thr Gln Asn Pro Lys Trp Ala Ser Leu Asn Leu Gly Val  
                   -20                  -15                  -10  
 Leu Met Cys Ile Glu Cys Ser Gly Ile His Arg Ser Leu Gly Thr Arg  
                   -5                  1                  5  
 Leu Ser Arg Val Arg Ser Leu Glu Leu Asp Asp Trp Pro Val Glu Leu  
       10                  15                  20  
 Arg Lys Val Met Ser Ser Ile Gly Asn Asp Leu Ala Asn Ser Ile Arg  
       25                  30                  35                  40  
 Glu

<210> 4462  
 <211> 168  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -28...-1  
 <223> score 7.6  
 seq LLFLLTXPHSCXP/PS

004220"666ET560

<400> 4462  
 Met Pro Val Met Ser Gln Leu Leu Ser Val His Ser Glu Pro Ser Leu  
                   -25                  -20                  -15  
 Leu Phe Leu Leu Thr Xaa Pro His Ser Cys Xaa Pro Pro Ser Leu Pro  
                   -10                  -5                  1  
 Ser Ser Ser Leu Ser Xaa Ser Leu Thr His Thr His Thr His Thr His  
 5                  10                  15                  20  
 Thr His Thr His Thr His Thr His  
                   25

<210> 4463  
 <211> 204  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -23...-1  
 <223> score 3.6  
       seq VLFVAVCFLVLFX/IY

<400> 4463  
 Met Ile Asn Ser Gly Ser Thr Pro Pro Arg Val Leu Phe Val Ala Val  
                   -20                  -15                  -10  
 Cys Phe Leu Val Leu Phe Xaa Ile Tyr Xaa Phe Ile Tyr Phe Phe Glu  
                   -5                  1                  5  
 Thr Xaa Xaa Thr Leu Val Pro Gln Ala Gly Val Gln Trp Cys Asn Leu  
 10                  15                  20                  25  
 Ser Ser Leu Gln Pro Pro Pro Pro Gly Phe Arg Gln Phe Ser Cys Leu  
                   30                  35                  40  
 Lys Pro Pro Glu  
                   45

<210> 4464  
 <211> 372  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -30...-1  
 <223> score 5.2  
       seq SLCFIFWDGVSLC/RS

<400> 4464  
 Met Glu Cys Ser Val Tyr Gly Met Pro Gly Asp Gly Lys Arg Arg Glu  
 -30                  -25                  -20                  -15  
 Lys Ser Leu Cys Phe Ile Phe Trp Asp Gly Val Ser Leu Cys Arg Ser  
                   -10                  -5                  1  
 Gly Trp Ser Leu Ala Met Ser Leu Arg Leu Glu Cys Ser Ser Thr Val  
                   5                  10                  15  
 Leu Ala His Cys Asn Leu His Leu Leu Ser Ser Gly Glu Phe Pro Ala

20                      25                      30  
 Ser Ala Ser Glu Val Ala Glu Ile Thr Gly Ala Cys His His Thr Gln  
 35                      40                      45                      50  
 Gln Ile Phe Val Xaa Leu Leu Glu Met Gly Phe His His Val Gly Gln  
                     55                      60                      65  
 Ala Val Leu Lys Leu Leu Met Thr Ser Asp Leu Leu Ser Trp Pro Pro  
                     70                      75                      80  
 Lys Val Leu Glu Leu Pro Ala Gly Val Ser His Arg  
                     85                      90

<210> 4465  
 <211> 408  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -24...-1  
 <223> score 7.8  
       seq VALLLAAAGTAVG/DR

<400> 4465  
 Met Gly Pro Trp Gly Trp Lys Leu Arg Trp Thr Val Ala Leu Leu Leu  
                     -20                      -15                      -10  
 Ala Ala Ala Gly Thr Ala Val Gly Asp Arg Cys Glu Arg Asn Glu Phe  
                     -5                      1                      5  
 Gln Cys Gln Asp Gly Lys Cys Ile Ser Tyr Lys Trp Val Cys Asp Gly  
                     10                      15                      20  
 Ser Ala Glu Cys Gln Asp Gly Ser Asp Glu Ser Gln Glu Thr Cys Leu  
 25                      30                      35                      40  
 Ser Val Thr Cys Lys Ser Gly Asp Xaa Ser Cys Gly Gly Arg Val Asn  
                     45                      50                      55  
 Arg Cys Ile Pro Gln Phe Trp Arg Cys Asp Gly Gln Val Asp Cys Asp  
                     60                      65                      70  
 Asn Gly Ser Asp Glu Gln Gly Cys Pro Pro Lys Thr Cys Ser Gln Asp  
                     75                      80                      85  
 Glu Phe Arg Cys His Asp Gly Lys Cys Ile Ser Arg Gln Phe Val Cys  
                     90                      95                      100  
 Asp Ser Asp Arg Asp Cys Leu Asp  
 105                      110

<210> 4466  
 <211> 231  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -24...-1  
 <223> score 11  
       seq LVLLFTLVQRSNG/EC

004220"666E560

<400> 4466  
Met Lys Ala Pro Ala Val Leu Ala Pro Gly Ile Leu Val Leu Leu Phe  
                  -20                  -15                  -10  
Thr Leu Val Gln Arg Ser Asn Gly Glu Cys Lys Glu Ala Leu Ala Lys  
                  -5                  1                  5  
Ser Glu Met Asn Val Asn Met Lys Tyr Gln Leu Pro Asn Phe Thr Ala  
10                  15                  20  
Glu Thr Pro Ile Gln Asn Val Ile Leu His Glu His His Ile Phe Leu  
25                  30                  35                  40  
Gly Ala Thr Asn Tyr Ile Xaa Val Leu Asn Glu Glu Asp  
                  45                  50

<210> 4467  
<211> 165  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -48...-1  
<223> score 4.1  
      seq FTTLSNLSLPSQT/KD

<400> 4467  
Met Cys Tyr Leu Ala Glu Leu Ser Leu Thr Thr Phe Xaa Xaa Gly Tyr  
                  -45                  -40                  -35  
Ile Val Thr Ser Arg Ala Thr Thr Thr Thr Thr Leu Ala Ile Gln Pro  
                  -30                  -25                  -20  
Gly Leu Pro Phe Thr Thr Leu Ser Asn Leu Ser Leu Pro Ser Gln Thr  
                  -15                  -10                  -5  
Lys Asp Glu Leu His Pro Pro  
1                  5

<210> 4468  
<211> 162  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -24...-1  
<223> score 4.6  
      seq SLLLYSLPLNIIG/LN

<400> 4468  
Met Tyr Pro Ser Leu Leu Val Asp Tyr Phe Pro Ser Leu Leu Leu Tyr  
                  -20                  -15                  -10  
Ser Leu Pro Leu Asn Ile Ile Gly Leu Asn Cys Ala Tyr Pro Leu Ile  
                  -5                  1                  5  
Asn Asn Phe Leu Lys Asn Asn Ser Tyr Thr Cys Val Xaa Val Pro Leu  
10                  15                  20  
Ala Phe Pro Ser Met Pro

25

30

<210> 4469  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -40..-1  
 <223> score 6.1  
 seq ICIGILVLPFIRC/CC

<400> 4469  
 Met Ile His Leu Arg Ile Ile Gln Arg Cys Tyr Met Ala Gly Leu Glu  
 -40 -35 -30 -25  
 Asn Lys Lys Asn Val Val Phe Glu Ala Lys Gln Ile Cys Ile Gly Ile  
 -20 -15 -10  
 Leu Val Leu Pro Phe Ile Arg Cys Cys Leu Val Gln Ile Thr Phe  
 -5 1 5  
 Ser Leu Ser Leu His Phe Leu Ile Tyr Asn Met Arg  
 10 15 20

<210> 4470  
 <211> 270  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -26..-1  
 <223> score 5.5  
 seq AMFLLSYAXPSCG/RS

<400> 4470  
 Met Thr Met Gln Arg Arg Leu Val Gln Gln Trp Ser Val Ala Met Phe  
 -25 -20 -15  
 Leu Leu Ser Tyr Ala Xaa Pro Ser Cys Gly Arg Ser Val Glu Gly Leu  
 -10 -5 1 5  
 Ser Arg Arg Leu Lys Arg Ala Val Ser Glu His Gln Leu Leu His Asp  
 10 15 20  
 Lys Gly Lys Ser Ile Gln Asp Leu Arg Arg Arg Phe Phe Leu His His  
 25 30 35  
 Leu Ile Ala Glu Ile His Thr Ala Glu Ile Arg Ala Thr Ser Glu Val  
 40 45 50  
 Ser Pro Asn Ser Lys Pro Ser Pro Asn Asn  
 55 60

<210> 4471  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -44...-1  
 <223> score 3.8  
 seq AIASLTLNNEEILA/RV

<400> 4471  
 Met Glu Ile Cys Ala Asp Pro Gln Phe Ile Ile Gly Gly Ala Thr Arg  
                   -40                  -35                  -30  
 Thr Asp Ile Cys Gln Gly Ala Leu Gly Asp Xaa Trp Leu Leu Ala Ala  
                   -25                  -20                  -15  
 Ile Ala Ser Leu Thr Leu Asn Glu Glu Ile Leu Ala Arg Val Val Pro  
                   -10                  -5                  1  
 Leu Asn Gln Ser Phe Gln Glu Asn Tyr Ala Gly Ile Phe  
 5                  10                  15

<210> 4472  
 <211> 291  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -22...-1  
 <223> score 5.9  
 seq LIYILWQLTGSA/SG

<400> 4472  
 Met Ala Gly Ser Pro Thr Cys Leu Thr Leu Ile Tyr Ile Leu Trp Gln  
                   -20                  -15                  -10  
 Leu Thr Gly Ser Ala Ala Ser Gly Pro Val Lys Glu Leu Val Gly Ser  
                   -5                  1                  5                  10  
 Val Gly Gly Ala Val Thr Phe Pro Leu Lys Ser Lys Val Lys Gln Val  
                   15                  20                  25  
 Asp Ser Ile Val Trp Thr Phe Asn Thr Thr Pro Leu Val Thr Ile Gln  
                   30                  35                  40  
 Pro Glu Gly Gly Thr Ile Ile Val Thr Gln Asn Arg Asn Arg Glu Arg  
                   45                  50                  55  
 Val Asp Phe Pro Asp Gly Gly Tyr Ser Leu Lys Leu Ser Lys Leu Lys  
 60                  65                  70  
 Lys  
 75

<210> 4473  
 <211> 264  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -37...-1

0044220"666EFS60

<223> score 6.5  
seq LLVFFLIVRTLSC/RS

<400> 4473  
Met Met Val Thr Tyr Arg Trp Gly Phe Gly Val Asp Val Xaa Phe Val  
-35 -30 -25  
Ala Val Asp Ala Ile Pro Phe Cys Leu Leu Val Phe Phe Leu Ile Val  
-20 -15 -10  
Arg Thr Leu Ser Cys Arg Ser Val Gly Val Cys Trp Arg Ser Thr Pro  
-5 1 5 10  
Asp Pro Val Cys Leu Gly Ile Thr Ser Arg Gly Cys Arg Thr Glu Ile  
15 20 25  
Leu Gln Asn Ser Lys Cys Cys Ser Leu Ile Leu Pro Leu Glu Ala Ser  
30 35 40  
Ser Gln Arg Gly Thr Glu Cys Met  
45 50

<210> 4474  
<211> 396  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -27...-1  
<223> score 4.4  
seq TSLLSPAAGPSFC/IV

<400> 4474  
Met Cys His Cys His Gly Gly Ile Arg Gln Glu Pro Thr Trp Thr Ser  
-25 -20 -15  
Leu Leu Ser Pro Ala Ala Gly Pro Ser Phe Cys Ile Val Tyr Ile Ala  
-10 -5 1 5  
Ser Trp Met Gly Arg Phe Ser Tyr Ala Thr Cys Cys Ser Gln Glu Glu  
10 15 20  
Glu Gly Met Ala Gly Thr Gly Gln Thr Val Asn Leu Pro Arg Asp Ala  
25 30 35  
Ile Pro Phe His Thr Phe Gly Cys Leu Ser Gly Ile Arg Leu Ala Ala  
40 45 50  
Ala Pro Thr Arg Gly Thr Glu Glu Lys Arg Asp Ala Thr Gly His Cys  
55 60 65  
Pro Ala Ser Ser Gly Leu Gln Gly Ala Pro Ser Gly Ala Pro Ala Cys  
70 75 80 85  
Phe Pro Glu Arg Val Ala Val Ala Pro Trp Gly Pro Glu Leu Leu Trp  
90 95 100  
Pro Pro Leu Ala  
105

<210> 4475  
<211> 192  
<212> PRT  
<213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 5.2  
 seq LLVAFRVFLGLFS/LP

<400> 4475  
 Met Tyr Met Trp Ser Lys Leu Leu Val Ala Phe Arg Val Phe Leu Gly  
                   -15                  -10                  -5  
 Leu Phe Ser Leu Pro Ser Asn His Asn Thr Tyr Cys Pro Phe Gln Pro  
                   1                  5                  10  
 Trp Gly Ile Pro Cys Ser Leu Arg Ile Gly Gly Leu Leu His Leu Gln  
           15                  20                  25  
 Cys Pro Leu Pro Pro Ser Leu His Pro Leu Pro Ser Leu Leu Thr Ser  
 30                  35                  40                  45

<210> 4476  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -26...-1  
 <223> score 4.7  
 seq TALSLVSSAFSFC/DM

<400> 4476  
 Met Pro Leu Ala Phe Leu Arg Pro Cys Glu Asn His Gly Thr Ala Leu  
           -25                  -20                  -15  
 Ser Leu Val Ser Ser Ala Phe Ser Phe Cys Asp Met Pro Ser Ser Gln  
           -10                  -5                  1                  5  
 Ile Asn Tyr Arg Tyr Leu Phe Arg Arg Glu Glu Asp Phe Thr Ser Gln  
           10                  15                  20  
 Arg Val Arg  
           25

<210> 4477  
 <211> 195  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -32...-1  
 <223> score 5.9  
 seq WTAMLISLAIVIA/LP

<400> 4477  
 Met Asn Trp Gln Lys Lys Leu Arg Gly Thr Leu Glu Pro His Trp Ser

004220"666ET560



-30                      -25                      -20  
 Gly Leu Leu Trp Thr Ala Met Leu Ile Ser Leu Ala Ile Val Ile Ala  
      -15                      -10                      -5  
 Leu Pro Lys Pro His Gly Ile Arg Ala Leu Ile Ala Ser Thr Ile Leu  
 1                      5                      10                      15  
 Arg Leu Ile Phe Ser Val Gly Leu Gln Pro Thr Leu Phe Leu Leu Gly  
                     20                      25                      30  
 Ala

<210> 4478  
 <211> 222  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -37...-1  
 <223> score 4.4  
       seq LELLTSGDPPASA/SQ

<400> 4478  
 Met His His His Thr Arg Leu Ile Phe Val Phe Leu Val Glu Met Gly  
          -35                      -30                      -25  
 Phe His His Ile Gly Gln Ala Ser Leu Glu Leu Leu Thr Ser Gly Asp  
      -20                      -15                      -10  
 Pro Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Lys His  
      -5                      1                      5                      10  
 His Ala Gln Pro Glu Ile Ile Phe Tyr Leu Leu Leu Cys Ala Phe Cys  
                     15                      20                      25  
 Val Leu Leu Arg Lys Ser Ser Pro Thr Leu  
          30                      35

<210> 4479  
 <211> 204  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -15...-1  
 <223> score 8  
       seq FISFLCLIALAGT/SS

<400> 4479  
 Met Pro Phe Ile Ser Phe Leu Cys Leu Ile Ala Leu Ala Gly Thr Ser  
      -15                      -10                      -5                      1  
 Ser Thr Met Leu Arg Ser Ala Leu Ala Gly Thr Ser Ser Thr Met Xaa  
          5                      10                      15  
 Xaa Arg Ser Gly Xaa Ser Gly Xaa Pro Xaa Leu Val Xaa Val Leu Arg  
          20                      25                      30  
 Gly Asn Ala Phe Ser Phe Phe Pro Phe Ser Leu Met Xaa Ala Met Gly  
      35                      40                      45

Cys His Arg Trp  
50

<210> 4480  
<211> 183  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -26...-1  
<223> score 7.9  
seq RVCLLSLSLFLWA/NR

<400> 4480  
Met Leu Arg Thr Trp Ser Ser Leu Pro Trp Thr Arg Phe Arg Val Cys  
-25 -20 -15  
Leu Leu Ser Leu Ser Leu Phe Leu Trp Ala Asn Arg Leu Glu Asp Ser  
-10 -5 1 5  
Arg Ser Cys Gln Pro Asn Pro Met Ser Leu Thr Thr Leu Pro Gly His  
10 15 20  
Arg Leu Lys Glu Ala Val Trp Leu Pro Ala Pro Ser Leu  
25 30 35

<210> 4481  
<211> 153  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -42...-1  
<223> score 7  
seq LFLYSLFTENVLA/HP

<400> 4481  
Met His Asp Ser Ser Gly Lys Asn Asn Phe Arg Lys Ile Pro Val Val  
-40 -35 -30  
Asn Leu Ile Tyr Leu Tyr Val Asp Ile His Ile His Lys Leu Phe Leu  
-25 -20 -15  
Tyr Ser Leu Phe Thr Glu Asn Val Leu Ala His Pro Cys Ile Val Leu  
-10 -5 1 5  
Arg Arg Leu

<210> 4482  
<211> 183  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -28...-1

<223> score 8.3  
seq ILFLINILPGTTG/QG

<400> 4482  
Met Ile Ile Thr Gln Thr Ser His Cys Tyr Met Thr Ser Leu Gly Ile  
-25 -20 -15  
Leu Phe Leu Ile Asn Ile Leu Pro Gly Thr Thr Gly Gln Gly Glu Ser  
-10 -5 1  
Arg Arg Gln Glu Pro Gly Asp Phe Val Lys Gln Asp Ile Gly Gly Leu  
5 10 15 20  
Ser Pro Lys His Ala Pro Asp Ile Pro Asp Asp Ser Thr  
25 30

<210> 4483  
<211> 228  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -20...-1  
<223> score 5.4  
seq WFWHSSALGLVLA/PP

<400> 4483  
Met Asn Leu His Phe Pro Gln Trp Phe Val His Ser Ser Ala Leu Gly  
-20 -15 -10 -5  
Leu Val Leu Ala Pro Pro Phe Ser Ser Pro Gly Thr Asp Pro Thr Phe  
1 5 10  
Pro Cys Ile Tyr Cys Arg Leu Leu Asn Met Ile Met Thr Arg Leu Ala  
15 20 25  
Phe Ser Phe Ile Thr Cys Leu Cys Pro Asn Leu Lys Glu Val Cys Leu  
30 35 40  
Ile Leu Pro Glu Lys Asn Cys Asn Ser Arg His Ala  
45 50 55

<210> 4484  
<211> 219  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -34...-1  
<223> score 4.4  
seq SLHLLWSRTVTTG/ET

<400> 4484  
Met His Gly Pro Ser Pro Arg Lys Ala Ala Phe Cys Ile Met Asn Pro  
-30 -25 -20  
Thr Gly Arg Ala Pro Ser Leu His Leu Leu Trp Ser Arg Thr Val Thr

# 2020 年 4 月

```
<220>
<221> SIGNAL
<222> -29...-1
<223> score 11.2
      seq GLLVVLVGGCAA/EE
```

```
<210> 4486
<211> 324
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SIGNAL
<222> -26..-1
<223> score 3.6
      seq TQAFGALLSGAGS/OV
```

2772

25                      30                      35  
 Pro Thr Ala Leu His Pro Pro Leu Gly Arg Arg Xaa Arg Glu Glu Leu  
 40                      45                      50  
 Glu Ala Leu Ser Tyr Ala Arg His Phe Gln Pro Phe Ala Arg Xaa His  
 55                      60                      65                      70  
 Gln Arg Gly Glu Cys Pro Gly Ser Trp Gly Cys Ala  
                     75                      80

<210> 4487  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -49...-1  
 <223> score 4.4  
       seq CLFSILFPLFIIS/AK

<400> 4487  
 Met His Gln Arg Leu Ser Asn Ile Glu Arg Asn Trp Pro Tyr Tyr Phe  
                     -45                      -40                      -35  
 Arg Phe Gly Leu Pro Leu Ala Phe Leu Thr Ala Met Gln Ser Ser Tyr  
                     -30                      -25                      -20  
 Ile Ile Ser Gly Cys Leu Phe Ser Ile Leu Phe Pro Leu Phe Ile Ile  
                     -15                      -10                      -5  
 Ser Ala Lys  
 1

<210> 4488  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -39...-1  
 <223> score 4.4  
       seq LELLTSGDPPASA/SQ

<400> 4488  
 Met Gly Met Cys His His Ala Gln Leu Ile Phe Val Phe Leu Val Glu  
                     -35                      -30                      -25  
 Thr Gly Phe His His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser  
                     -20                      -15                      -10  
 Gly Asp Pro Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Leu  
                     -5                      1                      5  
 Ser His His Ala Thr  
 10

<210> 4489  
 <211> 261

004220" 666T560

<212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 10.8  
 seq SLCCLLVLANARS/RP

<400> 4489  
 Met Trp Gln Leu Trp Ala Ser Leu Cys Cys Leu Leu Val Leu Ala Asn  
                   -15                  -10                  -5  
 Ala Arg Ser Arg Pro Ser Xaa His Pro Val Ser Asp Glu Leu Val Asn  
                   1                  5                  10  
 Tyr Val Asn Lys Arg Asn Thr Thr Trp Gln Ala Gly His Asn Phe Tyr  
           15                  20                  25  
 Asn Val Asp Met Gly Tyr Leu Lys Arg Leu Cys Gly Thr Phe Leu Gly  
 30                  35                  40                  45  
 Gly Pro Lys Pro Pro Gln Arg Val Met Phe Thr Glu Asp Leu Lys Leu  
                   50                  55                  60  
 Pro Ala Ser Phe Asp Ala Arg  
                   65

<210> 4490  
 <211> 372  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -30...-1  
 <223> score 6.6  
 seq LVWVMAAVVLCTA/QV

<400> 4490  
 Met Glu Arg Leu Val Ile Arg Met Pro Phe Cys His Leu Ser Thr Tyr  
 -30                  -25                  -20                  -15  
 Ser Leu Val Trp Val Met Ala Ala Val Val Leu Cys Thr Ala Gln Val  
                   -10                  -5                  1  
 Gln Val Val Thr Gln Asp Glu Arg Glu Gln Leu Tyr Thr Pro Ala Ser  
           5                  10                  15  
 Leu Lys Cys Ser Leu Gln Asn Ala Gln Glu Ala Leu Ile Val Thr Trp  
           20                  25                  30  
 Gln Lys Lys Lys Ala Val Ser Pro Glu Asn Met Val Thr Phe Ser Glu  
 35                  40                  45                  50  
 Asn His Gly Val Val Ile Gln Pro Ala Tyr Lys Asp Lys Ile Asn Ile  
                   55                  60                  65  
 Thr Gln Leu Gly Leu Gln Asn Ser Thr Ile Thr Phe Trp Asn Ile Thr  
           70                  75                  80  
 Leu Glu Asp Glu Gly Cys Tyr Met Cys Leu Phe Asn  
           85                  90

004220"666E750

<210> 4491  
 <211> 213  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SIGNAL  
 <222> -47...-1  
 <223> score 4.5  
 seq PIFGLLVPSQIFS/SL

<400> 4491  
 Met Cys Thr Leu Thr Asp Thr His Thr His Val Gln Val His Lys Ser  
           -45                          -40                          -35  
 Lys Pro Cys Gln Leu Leu Ser Pro Pro Pro Pro Xaa His Gly Pro Leu  
           -30                          -25                          -20  
 Leu Leu Pro Ile Phe Gly Leu Leu Val Pro Ser Gln Ile Phe Ser Ser  
           -15                          -10                          -5                          1  
 Leu Leu Asn Ser Leu His Leu Gly Leu Pro Ser Phe Pro Lys Met Pro  
                           5                          10                          15  
 Leu Met Ile Phe Leu Pro Arg  
           20

<210> 4492  
 <211> 225  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 8  
 seq LLLLVATAWHGQG/IP

<400> 4492  
 Met Gly Pro Gly Val Leu Leu Leu Leu Leu Val Ala Thr Ala Trp His  
                           -15                          -10                          -5  
 Gly Gln Gly Ile Pro Val Ile Glu Pro Ser Val Pro Glu Leu Val Val  
                           1                          5                          10  
 Lys Pro Gly Ala Thr Val Thr Leu Arg Cys Val Gly Asn Gly Ser Val  
           15                          20                          25  
 Glu Trp Asp Gly Pro Pro Ser Pro His Trp Thr Leu Tyr Ser Asp Gly  
 30                          35                          40                          45  
 Ser Ser Ser Ile Leu Ser Thr Asn Asn Ala Thr  
                           50                          55

<210> 4493  
 <211> 189  
 <212> PRT  
 <213> Homo sapiens

<220>

<221> SIGNAL  
 <222> -18...-1  
 <223> score 4.7  
 seq LFFCFCFCFVLRQ/SL

<400> 4493  
 Met Val Gln Gly Asp Leu Phe Phe Cys Phe Cys Phe Cys Phe Val Leu  
                   -15                  -10                  -5  
 Arg Gln Ser Leu Pro Leu Ser Pro Arg Leu Glu Cys Ser Gly Ala Ile  
           1                  5                  10  
 Ser Ala His Cys Asn Leu Tyr Leu Leu Asp Ser Asp Asp Ser Tyr Ala  
 15                  20                  25                  30  
 Leu Val Ser Leu Val Ala Gly Thr Thr Gly Ile Cys His His Thr  
                   35                  40                  45

<210> 4494  
 <211> 189  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -24...-1  
 <223> score 5.1  
 seq IFIYLLFSRQGLA/LS

<400> 4494  
 Met Tyr Val Cys Asp Met Gln Val Val Gly Glu Ile Phe Ile Tyr Leu  
                   -20                  -15                  -10  
 Leu Phe Ser Arg Gln Gly Leu Ala Leu Ser Pro Arg Leu Glu Cys Ser  
                   -5                  1                  5  
 Cys Val Asn Ile Ala His Tyr Ser Leu Gln Xaa Leu Gly Ser Asn Asn  
 10                  15                  20  
 Pro Pro Ile Ser Ala Ser Gln Val Ser Ser Gly Thr Thr Gly Met  
 25                  30                  35

<210> 4495  
 <211> 201  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -34...-1  
 <223> score 4  
 seq VIFLSIFVIIIVTC/LM

<400> 4495  
 Met Phe Tyr Lys Gly Ser Met Lys Gln Asp Lys Ile Trp Ser Lys Glu  
                   -30                  -25                  -20  
 Gly Phe Tyr Ala Val Val Ile Phe Leu Ser Ile Phe Val Ile Ile Val



[illegible]

```
<220>
<221> SIGNAL
<222> -28..-1
<223> score 4.2
      seq LACGXGXXHPTXA/FV
```

```
<210> 4497
<211> 159
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SIGNAL
<222> -18..-1
<223> score 6.3
      seq LFLFFFFFHFSFL/NW
```

2777

<210> 4498  
 <211> 387  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -17...-1  
 <223> score 9.2  
 seq PALLLAFLPLASQ/KS

<400> 4498  
 Met Arg Trp Ala Pro Ala Leu Leu Leu Ala Phe Leu Pro Leu Ala Ser  
           -15                  -10                  -5  
 Gln Lys Ser Ser Asn Leu Gln Gly Arg Arg Lys Ser Val Thr Arg Pro  
       1                  5                  10                  15  
 Ala Gly Ser Ser Ala Val Ile Thr Cys Asp Leu Thr Val Ile Asn Thr  
                   20                  25                  30  
 Phe Tyr Ile His Trp Tyr Leu His Gln Ala Gly Lys Ala Pro Gln His  
                   35                  40                  45  
 Leu Pro Tyr Tyr Asp Pro Tyr Tyr Ser Arg Val Val Leu Glu Ser Arg  
           50                  55                  60  
 Ile Ser Arg Gly Lys Tyr Phe Thr Tyr Ala Ser Met Arg Arg Ser Trp  
       65                  70                  75  
 Lys Leu Ile Leu Gln Asn Leu Ile Glu Asn Asp Ser Gly Ser Ile Thr  
 80                  85                  90                  95  
 Val Pro Pro Gly Thr Gly Thr Val Ile His Thr Cys Pro Thr Pro His  
                   100                  105                  110  
 Trp

<210> 4499  
 <211> 282  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -33...-1  
 <223> score 5  
 seq LELLGLSGPPASG/SL

<400> 4499  
 Met Gly Ser Leu Leu Cys Cys Pro Ser Trp Ser Ala Val Val Ile Ile  
           -30                  -25                  -20  
 Val His Cys Asn Leu Glu Leu Leu Gly Leu Ser Gly Pro Pro Ala Ser  
           -15                  -10                  -5  
 Gly Ser Leu Val Gly Arg Thr Thr Gly Val Cys Gln His Ala Pro Leu  
       1                  5                  10                  15  
 Ile Lys Lys Asn Phe Phe Phe Val Glu Thr Gly Val Ser Leu Cys Leu  
                   20                  25                  30  
 Thr Arg Leu Val Trp Asn Ser Gly Pro Gln Ala Lys His Trp Asp Tyr

004220"666ET560

35 40 45  
Arg Ser Lys Pro Leu Cys Gln Val Gln Glu Glu Cys Ala Pro  
50 55 60

<210> 4500  
<211> 327  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -43...-1  
<223> score 11  
seq VFVLLLVLSLAIG/LY

<400> 4500  
Met Ser Val Gly Val Ser Xaa Xaa Ala Pro Leu Ser Pro Thr Ser Gly  
-40 -35 -30  
Thr Ser Val Gly Met Ser Thr Phe Ser Ile Met Asp Tyr Val Val Phe  
-25 -20 -15  
Val Leu Leu Leu Val Leu Ser Leu Ala Ile Gly Leu Tyr His Ala Cys  
-10 -5 1 5  
Arg Gly Trp Gly Arg His Thr Val Gly Xaa Leu Leu Met Ala Asp Arg  
10 15 20  
Lys Met Gly Cys Leu Pro Val Ala Leu Ser Leu Leu Ala Thr Phe Gln  
25 30 35  
Ser Ala Val Ala Ile Leu Gly Val Pro Ser Glu Xaa Tyr Arg Phe Gly  
40 45 50  
Thr Xaa Tyr Trp Phe Leu Gly Cys Cys Tyr Phe Leu Gly  
55 60 65

<210> 4501  
<211> 264  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -47...-1  
<223> score 5.8  
seq LMCFGALIGLCAC/IC

<400> 4501  
Met Glu Lys Phe Val Asp Pro Gly Asn His Asn Ser Gly Ile Asp Leu  
-45 -40 -35  
Leu Arg Thr Tyr Leu Trp Arg Cys Gln Phe Leu Leu Pro Phe Val Ser  
-30 -25 -20  
Leu Gly Leu Met Cys Phe Gly Ala Leu Ile Gly Leu Cys Ala Cys Ile  
-15 -10 -5 1  
Cys Arg Ser Leu Tyr Pro Thr Ile Ala Thr Gly Ile Leu His Leu Leu  
5 10 15  
Ala Gly Leu Cys Thr Leu Gly Ser Val Ser Cys Tyr Val Ala Gly Ile

30

```
<220>
<221> SIGNAL
<222> -25..-1
<223> score 7.1
      seq LFVMAFLLSGAAP/LK
```

```
<220>
<221> SIGNAL
<222> -36..-1
<223> score 4.4
      seq LWFFLPSLXCPEC/CP
```

2780

<210> 4504  
 <211> 177  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 4.1  
 seq FLWLSSIPSYIYT/HT

<400> 4504  
 Met Pro Leu Ile His Ser Phe Leu Trp Leu Ser Ser Ile Pro Ser Tyr  
                   -15                  -10                  -5  
 Ile Tyr Thr His Thr His Met Tyr Val Tyr Thr Tyr Ile Tyr Thr Arg  
                   1                  5                  10  
 Thr Tyr Met Tyr Val Tyr Thr Tyr Thr His Thr Asn Thr Pro Thr His  
           15                  20                  25  
 His Ser Phe Phe Ile Leu Ser Leu Ile Ala Gly  
 30                  35                  40

<210> 4505  
 <211> 207  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -18...-1  
 <223> score 5.7  
 seq AFFSLAALAEVAA/ME

<400> 4505  
 Met Pro Ala Val Ser Ala Phe Phe Ser Leu Ala Ala Leu Ala Glu Val  
                   -15                  -10                  -5  
 Ala Ala Met Glu Asn Val His Arg Gly Gln Arg Ser Thr Pro Leu Thr  
           1                  5                  10  
 His Asp Gly Gln Pro Lys Glu Met Pro Gln Val Leu Tyr Leu Phe Pro  
 15                  20                  25                  30  
 Ala Leu Thr Ser Glu Ala Pro Phe His Cys Lys Thr Leu Cys Phe Thr  
                   35                  40                  45  
 Tyr Tyr Pro Ser Thr  
                   50

<210> 4506  
 <211> 216  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -17...-1

004220.666500

<223> score 4.2  
seq LAFLLVSLYWSHM/HP

<400> 4506  
Met Asp Trp Ser Leu Ala Phe Leu Leu Val Ser Leu Tyr Trp Ser His  
-15 -10 -5  
Met His Pro Cys Tyr Trp Ser Trp Pro Cys Ser Cys Gly Phe Val Asp  
1 5 10 15  
Ser Pro Cys Ile Cys Thr Ala Ser Thr Arg Cys Cys Cys Ser Ser Leu  
20 25 30  
Cys Cys Leu Trp Arg Leu Ala Leu Trp Asp Trp Thr Ser Asn Gly Ser  
35 40 45  
Arg Ser Gly Ile Ala Cys Val Cys  
50 55

<210> 4507  
<211> 198  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -14...-1  
<223> score 3.7  
seq CSLLSGWGQLLRC/VQ

<400> 4507  
Met Cys Ser Leu Leu Ser Gly Trp Gly Gln Leu Leu Arg Cys Val Gln  
-10 -5 1  
Thr Pro Ala Glu Pro Arg Asp Val Asn Lys Lys Xaa Glu Lys Lys Glu  
5 10 15  
Lys Tyr Met Pro Leu Val Asp Ser Leu Cys Gly Gly Leu Gly Thr Arg  
20 25 30  
Asn Ser Asp Cys Leu Arg Gly Gly Ala Gly Arg Gly Arg Asp Gly Arg  
35 40 45 50  
Arg Ile

<210> 4508  
<211> 192  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -48...-1  
<223> score 5.8  
seq LHLLGSSNSPASA/SS

<400> 4508  
Met Thr Phe Tyr Leu Phe Val Cys Xaa Xaa Ile Tyr Xaa Leu Arg Trp  
-45 -40 -35

004220"666ET560

Ser Leu Ala Leu Ser Pro Arg Leu Glu Cys Ser Gly Ala Ile Ser Ala  
 -30 -25 -20  
 His Cys Ser Leu His Leu Leu Gly Ser Ser Asn Ser Pro Ala Ser Ala  
 -15 -10 -5  
 Ser Ser Ala Asn Phe Cys Ile Phe Ser Arg Asp Gly Ile Ser Leu Cys  
 1 5 10 15

<210> 4509  
 <211> 201  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -22...-1  
 <223> score 7.2  
 seq IIYALQFLFLVFA/PS

<400> 4509  
 Met Asn Arg Ser Cys Arg Asn Thr Gly Ile Ile Tyr Ala Leu Gln Phe  
 -20 -15 -10  
 Leu Phe Leu Val Phe Ala Pro Ser Ser Leu Gly Tyr Phe Glu Trp Ile  
 -5 1 5 10  
 Val Ala Ile Asn Gln Asp Leu Val Leu Phe Val Phe Cys Leu Ser Phe  
 15 20 25  
 Ser Leu Arg Ile Ser Ile Ile Gln Gly Lys Arg Lys Ala Ala Phe Pro  
 30 35 40  
 Thr Pro Pro  
 45

<210> 4510  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -43...-1  
 <223> score 4  
 seq AAWCSLVLSFCRL/HK

<400> 4510  
 Met Ala Met Ser Phe Glu Trp Pro Trp Gln Tyr Arg Phe Pro Pro Phe  
 -40 -35 -30  
 Phe Thr Leu Gln Pro Asn Val Asp Thr Arg Gln Lys Gln Leu Ala Ala  
 -25 -20 -15  
 Trp Cys Ser Leu Val Leu Ser Phe Cys Arg Leu His Lys Gln Ser Ser  
 -10 -5 1 5  
 Met Thr Val Met Glu Ala Gln Glu Ser Pro Leu Arg  
 10 15

<210> 4511

<211> 153  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SIGNAL  
 <222> -33...-1  
 <223> score 6  
       seq LAHFLIGLTVCFG/EG

<400> 4511  
 Met Tyr Leu Tyr Leu Leu Ser Ile Cys Met Ser Ser Leu Lys Lys Cys  
                   -30                  -25                  -20  
 Leu Phe Lys Phe Leu Ala His Phe Leu Ile Gly Leu Thr Val Cys Phe  
                   -15                  -10                  -5  
 Gly Glu Gly Xaa Leu Met Ser Tyr Arg Ser Ser Tyr Leu Leu Leu Lys  
       1                          5                          10                          15  
 Gly Pro Pro

<210> 4512  
 <211> 162  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SIGNAL  
 <222> -27...-1  
 <223> score 5  
       seq CVLTASSWAVLWS/AR

<400> 4512  
 Met Phe Ala Asp Ala Asp Arg Arg Asp Pro Asn Glu Ser Gln Cys Val  
                   -25                  -20                  -15  
 Leu Thr Ala Ser Ser Trp Ala Val Leu Trp Ser Ala Arg Cys Glu Gly  
                   -10                  -5                  1                  5  
 Leu Ala Trp Gly His Thr Ala Asp Ser Xaa Arg Gly Met Pro Met Val  
                           10                          15                          20  
 Leu Ser Ile Gly Arg Thr  
                   25

<210> 4513  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -17...-1  
 <223> score 3.6  
       seq WIYAFISLGYILG/SG



<400> 4513  
 Met Xaa Xaa Cys Trp Ile Tyr Ala Phe Ile Ser Leu Gly Tyr Ile Leu  
           -15                  -10                  -5  
 Gly Ser Gly Ile Val Gly Leu Phe Gly Asn Phe Met Phe Lys Leu Leu  
       1                      5                      10                      15  
 Arg Asn Cys Gln Thr Val Phe Gln Asp Gly Tyr Ala Ile Leu Pro Phe  
                       20                      25                      30  
 Pro Pro Thr

<210> 4514  
 <211> 162  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -28...-1  
 <223> score 4.5  
       seq FLPFLLSLPLDQT/LP

<400> 4514  
 Met Xaa Xaa Lys Ala Cys Arg Thr Leu Ala Trp Leu Pro Xaa Pro Phe  
           -25                      -20                      -15  
 Leu Pro Phe Leu Leu Ser Leu Pro Leu Asp Gln Thr Leu Pro Arg Gln  
           -10                      -5                      1  
 Gly Pro Gly Gln Ser Leu Ser Phe Pro Glu Asn Tyr Gln Thr Leu Pro  
       5                      10                      15                      20  
 Lys Ser Thr Arg His Pro  
                       25

<210> 4515  
 <211> 228  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -13...-1  
 <223> score 4.9  
       seq MLTASLAFQLVDG/VS

<400> 4515  
 Met Leu Thr Ala Ser Leu Ala Phe Gln Leu Val Asp Gly Val Ser Trp  
           -10                      -5                      1  
 Asn Phe Ser Val Ser Lys Met Leu Ala Ser Pro Ser Thr Ser Gly Gln  
       5                      10                      15  
 Leu Ser Gln Phe Gly Ala Ser Leu Tyr Gly Gln Gln Ser Ala Leu Gly  
       20                      25                      30                      35  
 Leu Pro Met Arg Gly Met Ser Asn Asn Thr Pro Gln Leu Asn Arg Ser  
                       40                      45                      50  
 Leu Ser Gln Xaa Leu Ser Tyr Arg Ala Thr Ser Arg  
           55                      60

004220"666E7E60

<210> 4516  
 <211> 204  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -48...-1  
 <223> score 5.2  
 seq EVVTLPLTSHCLA/QV

<400> 4516  
 Met Gly Leu His Ile Ser Leu Ile Lys Phe Leu Leu Ala Asn Gly Pro  
                   -45                  -40                  -35  
 His Ile Pro Ser His Gln Arg Pro Phe Glu Pro Lys Gly Glu Lys Ser  
                   -30                  -25                  -20  
 Cys Arg Ile Glu Val Val Thr Leu Pro Leu Thr Ser His Cys Leu Ala  
                   -15                  -10                  -5  
 Gln Val Ala Ser Ser Asp Leu Ile His Arg Met Arg Thr Ile Thr Gly  
 1                  5                  10                  15  
 Thr Ser Ser His  
                   20

<210> 4517  
 <211> 297  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -46...-1  
 <223> score 6.9  
 seq VTMLMGFLGCIGA/VN

<400> 4517  
 Met Ser Glu Leu Glu Thr Ala Cys Gly Lys Pro Met Arg His Lys Thr  
                   -45                  -40                  -35  
 Ser Ser Ser Ser Leu Arg Met Gly Ala Tyr Val Phe Ile Gly Val Gly  
                   -30                  -25                  -20                  -15  
 Ala Val Thr Met Leu Met Gly Phe Leu Gly Cys Ile Gly Ala Val Asn  
                   -10                  -5                  1  
 Glu Val Arg Cys Leu Leu Gly Leu Tyr Phe Ala Phe Leu Leu Leu Ile  
                   5                  10                  15  
 Leu Ile Ala Gln Val Thr Ala Gly Ala Leu Phe Tyr Phe Asn Met Gly  
                   20                  25                  30  
 Lys Leu Lys Gln Glu Met Gly Gly Ile Val Thr Glu Leu Ile Arg Asp  
 35                  40                  45                  50  
 Tyr Asn Ser

<210> 4518  
 <211> 198

004220" 666ET560

<212> PRT  
 <213> Homo sapiens  
 <220>  
 <221> SIGNAL  
 <222> -25...-1  
 <223> score 4.6  
 seq GFFCLFVLRQSFT/LS

<400> 4518  
 Met Phe Pro Phe Pro His Thr Gln Cys Leu His Leu Gly Phe Phe Cys  
 -25 -20 -15 -10  
 Leu Phe Val Leu Arg Gln Ser Phe Thr Leu Ser Pro Arg Leu Glu Cys  
 -5 1 5  
 Ser Gly Ala Ile Leu Ala His Cys Asn Leu Cys Leu Pro Arg Ser Ser  
 10 15 20  
 Ser Thr Pro Ala Ser Ala Ser Gln Glu Leu Gly Leu Gln Met Arg Thr  
 25 30 35  
 Thr Val  
 40

<210> 4519  
 <211> 198  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -36...-1  
 <223> score 5.5  
 seq LHFVYCFLLCAEA/FL

<400> 4519  
 Met Phe Gln Leu Leu Ile Leu Cys Gln Met Asn Ser Leu Lys Ile Phe  
 -35 -30 -25  
 Ser Pro Ile Leu Gly Trp Ser Leu His Phe Val Tyr Cys Phe Leu Cys  
 -20 -15 -10 -5  
 Cys Ala Glu Ala Phe Leu Leu Asp Met Ile Pro Phe Met Gln Phe Tyr  
 1 5 10  
 Phe Gly Tyr Leu Cys Leu Trp Gly Ile Thr Leu Lys Ile Phe Ala Gln  
 15 20 25  
 Ser Asn  
 30

<210> 4520  
 <211> 168  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -32...-1

004220"666E1560

<223> score 10.6  
seq VVFLLLLVSTLSS/VV

<400> 4520  
Met Thr Tyr Phe Pro Leu Gly Arg Tyr Pro Val Met Gly Leu Leu Asp  
-30 -25 -20  
Gln Met Val Val Val Phe Leu Leu Leu Val Ser Thr Leu Ser Ser  
-15 -10 -5  
Val Val Val Leu Leu Val Cys Ile Pro Thr Ser Ser Val Lys Leu Phe  
1 5 10 15  
Pro Phe His His Ile His Thr Asn  
20

<210> 4521  
<211> 204  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -31..-1  
<223> score 6.4  
seq GFMVLLMIPWGSA/AK

<400> 4521  
Met Gly Cys Ser Leu Pro Leu Ser Cys Ile Met Val Arg Ser Val Ala  
-30 -25 -20  
Trp Ala Gly Phe Met Val Leu Leu Met Ile Pro Trp Gly Ser Ala Ala  
-15 -10 -5 1  
Lys Leu Val Cys Tyr Phe Thr Asn Trp Ala Gln Tyr Arg Gln Gly Glu  
5 10 15  
Ala Arg Phe Xaa Ala Gln Xaa Xaa Gly Pro Gln Pro Leu Xaa Pro Pro  
20 25 30  
His Leu Arg Leu  
35

<210> 4522  
<211> 159  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -48..-1  
<223> score 3.5  
seq LIIHLMGTTGLCA/SL

<400> 4522  
Met Arg Val Cys Leu Xaa Lys Lys Glu Gln Ser Cys Val Cys Val Cys  
-45 -40 -35  
Ala His Val Phe Val Gly Ile Ile Leu Thr Gln Ser Leu Lys Leu Thr



<220>  
 <221> SIGNAL  
 <222> -40...-1  
 <223> score 4.9  
 seq SLKICGLVFGILA/LT

<400> 4525  
 Met Ala Lys Asn Pro Pro Glu Asn Cys Glu Asp Cys His Ile Leu Asn  
 -40 -35 -30 -25  
 Ala Glu Ala Phe Lys Ser Lys Lys Ile Cys Lys Ser Leu Lys Ile Cys  
 -20 -15 -10  
 Gly Leu Val Phe Gly Ile Leu Ala Leu Thr Leu Ile Val Leu Phe Trp  
 -5 1 5  
 Gly Ser Lys His Phe Trp Pro Glu Val Pro Lys Lys Ala Tyr Asp Met  
 10 15 20  
 Glu His Thr  
 25

<210> 4526  
 <211> 237  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -45...-1  
 <223> score 14  
 seq LLLLLLLPSPLHP/HP

<400> 4526  
 Met Gly Leu Glu Glu Arg Arg Thr Glu Ser Ser Gly Thr Leu Glu Asp  
 -45 -40 -35 -30  
 Ala Leu Cys Leu Arg Arg Ser Phe Cys Leu Pro Val Leu Met Pro Leu  
 -25 -20 -15  
 Leu Leu Leu Leu Leu Leu Pro Ser Pro Leu His Pro His Pro Ile  
 -10 -5 1  
 Cys Glu Val Ser Lys Val Ala Ser His Leu Glu Val Asn Cys Asp Lys  
 5 10 15  
 Arg Asn Leu Thr Ala Leu Pro Pro Asp Leu Pro Lys Asp Thr Asn  
 20 25 30

<210> 4527  
 <211> 168  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -30...-1  
 <223> score 7.4  
 seq LFPLLTHSEPSQG/QS

<400> 4527  
 Met Cys Arg Ile Ser Cys Ser Asn Leu Ser Asn Thr Leu Met Arg Asn  
 -30 -25 -20 -15  
 Leu Leu Phe Pro Leu Leu Thr His Ser Glu Pro Ser Gln Gly Gln Ser  
 -10 -5 1  
 Ala Lys Ile Ala Gly Ile Val Cys Ser Cys Leu Gly Phe Met Pro Leu  
 5 10 15  
 Asn Phe Thr Phe Tyr Tyr Thr Ala  
 20 25

<210> 4528  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -38...-1  
 <223> score 4  
 seq FKPXSCLSLLSNX/DY

<400> 4528  
 Met Glu Ser His Ser Val Ala Gln Ala Arg Met Arg Xaa Xaa Asn Leu  
 -35 -30 -25  
 Ser Ser Leu Gln Pro Leu Pro Pro Gly Phe Lys Pro Xaa Ser Cys Leu  
 -20 -15 -10  
 Ser Leu Leu Ser Asn Xaa Asp Tyr Arg His Ala Pro Pro Phe Leu Ala  
 -5 1 5 10  
 Asn Phe Xaa Ile Phe His Arg Asp Gly Val Ser Pro  
 15 20

<210> 4529  
 <211> 252  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -20...-1  
 <223> score 6.9  
 seq LYLLGMLVPGGLG/YD

<400> 4529  
 Met Lys Pro Leu Leu Glu Thr Leu Tyr Leu Leu Gly Met Leu Val Pro  
 -20 -15 -10 -5  
 Gly Gly Leu Gly Tyr Asp Arg Ser Leu Ala Gln His Arg Gln Glu Ile  
 1 5 10  
 Val Asp Lys Ser Val Ser Pro Trp Ser Leu Glu Thr Tyr Ser Tyr Asn  
 15 20 25  
 Ile Tyr His Pro Met Gly Glu Ile Tyr Glu Trp Met Arg Glu Ile Ser

30 35 40  
 Glu Lys Tyr Lys Glu Val Val Thr Gln His Phe Leu Gly Val Thr Tyr  
 45 50 55 60  
 Glu Thr Gln Pro

<210> 4530  
 <211> 237  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -24...-1  
 <223> score 4.6  
 seq FFIFCSLNTLLLG/GV

<400> 4530  
 Met Lys Ser Ala Lys Leu Gly Phe Leu Leu Arg Phe Phe Ile Phe Cys  
 -20 -15 -10  
 Ser Leu Asn Thr Leu Leu Leu Gly Gly Val Asn Lys Ile Ala Glu Lys  
 -5 1 5  
 Ile Cys Gly Asp Leu Lys Asp Pro Cys Lys Leu Asp Met Asn Phe Gly  
 10 15 20  
 Ser Cys Tyr Glu Val His Phe Arg Tyr Phe Tyr Asn Arg Thr Ser Lys  
 25 30 35 40  
 Arg Cys Glu Thr Phe Val Phe Ser Ser Cys Asn Gly Asn Leu Asn  
 45 50 55

<210> 4531  
 <211> 219  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -39...-1  
 <223> score 5.9  
 seq SAWWCVLLEWSQG/AS

<400> 4531  
 Met Glu Leu Thr Asn Lys Gln Thr Gly Thr Asp Arg His Glu Gln Val  
 -35 -30 -25  
 Leu Arg Arg Val Lys Gln Asp Lys Arg Ile Ser Ala Trp Trp Cys Val  
 -20 -15 -10  
 Leu Leu Glu Trp Ser Gln Gly Ala Ser Leu Arg Arg Gln His Arg Gly  
 -5 1 5  
 Glu Thr Ser Pro Lys Ser Gly Glu Arg Leu Ser Arg Gln Arg Glu Gln  
 10 15 20 25  
 Gln Lys Pro Gln Met Ser Asp Lys Ser  
 30

<210> 4532



<211> 165  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -23...-1  
 <223> score 9.4  
 seq SLLFICFFGESFC/IC

<400> 4532  
 Met Ser Asn Gln Arg Leu Pro Leu Ile Phe Ser Leu Leu Phe Ile Cys  
                   -20                  -15                  -10  
 Phe Phe Gly Glu Ser Phe Cys Ile Cys Asp Gly Thr Val Trp Thr Xaa  
                   -5                  1                  5  
 Val Xaa Trp Glu Ile Leu Pro Glu Glu Val His Tyr Trp Lys Val Lys  
 10                  15                  20                  25  
 Gly Ser Pro Ser His Cys Leu  
                   30

<210> 4533  
 <211> 198  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -35...-1  
 <223> score 7.3  
 seq LDLLGSSSPPTSA/SQ

<400> 4533  
 Met Met Leu Asp Phe Ala Leu Ser Pro Arg Leu Glu Arg Ser Gly Leu  
 -35                  -30                  -25                  -20  
 Ile Met Ala Cys Cys Thr Leu Asp Leu Leu Gly Ser Ser Ser Pro Pro  
                   -15                  -10                  -5  
 Thr Ser Ala Ser Gln Val Ala Gly Thr Gly His Val Pro Pro His Pro  
                   1                  5                  10  
 Ala Ser Phe Phe Tyr Phe Xaa Val Xaa Gln Val Tyr Tyr Val Ser Gln  
 15                  20                  25  
 Leu Ile  
 30

<210> 4534  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -21...-1  
 <223> score 9.5

004220"666T560

seq LLVLFVLLANVQG/PG

<400> 4534

Met Gly Ser Ser Gly Leu Leu Ser Leu Leu Val Leu Phe Val Leu Leu  
-20 -15 -10  
Ala Asn Val Gln Gly Pro Gly Leu Thr Asp Trp Leu Phe Pro Arg Arg  
-5 1 5 10  
Cys Pro Lys Ile Arg Glu Glu Cys Glu Phe Gln Glu Arg Asp Val Cys  
15 20 25  
Thr Lys Asp Arg Gln Cys Arg  
30

<210> 4535

<211> 264

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -45..-1

<223> score 4.2

seq FLIFYLFIFETES/HS

<400> 4535

Met Ala Val Ser Val Val Leu Glu Thr Gly Lys Pro Gln Leu Ser Ile  
-45 -40 -35 -30  
Tyr Thr Ala Leu Thr Val Thr Arg Leu Leu Ile Phe Phe His Phe Phe  
-25 -20 -15  
Phe Leu Ile Phe Tyr Leu Phe Ile Phe Glu Thr Glu Ser His Ser Leu  
-10 -5 1  
Thr Gln Ala Ala Val Gln Trp Cys Asp Leu Gly Ser Leu Arg Pro Leu  
5 10 15  
Pro Pro Gly Leu Ser Asp Ser Ser Val Ser Ala Ser Arg Val Ala Gly  
20 25 30 35  
Ile Thr Gly Val Cys Arg His Ala  
40

<210> 4536

<211> 153

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -43..-1

<223> score 6.8

seq ALSAXTFVSFLHA/AP

<400> 4536

Met Lys Gln Trp Leu Cys Trp Val Leu Arg Leu Glu Gly Arg Gln Gly  
-40 -35 -30

Leu Gly Val Gly Glu Pro Arg Gly Leu Arg Leu Cys Leu Gly Ala Leu  
 -25 -20 -15  
 Ser Ala Xaa Thr Phe Val Ser Phe Leu His Ala Ala Pro His Ser His  
 -10 -5 1 5  
 Pro Ala Leu

<210> 4537  
 <211> 246  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -16..-1  
 <223> score 10.1  
 seq LVLTLCTLPLAVA/SA

<400> 4537  
 Met Glu Arg Leu Val Leu Thr Leu Cys Thr Leu Pro Leu Ala Val Ala  
 -15 -10 -5  
 Ser Ala Gly Cys Ala Thr Thr Pro Ala Arg Asn Leu Ser Cys Tyr Gln  
 1 5 10 15  
 Cys Phe Lys Val Ser Ser Trp Thr Glu Cys Pro Pro Thr Trp Cys Ser  
 20 25 30  
 Pro Leu Asp Gln Val Cys Ile Ser Asn Glu Val Val Val Ser Phe Lys  
 35 40 45  
 Trp Ser Val Arg Val Leu Leu Ser Lys Arg Cys Ala Pro Arg Cys Pro  
 50 55 60  
 Asn Ser  
 65

<210> 4538  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -30..-1  
 <223> score 4.8  
 seq CLFLNARLAGTLC/QL

<400> 4538  
 Met Arg Val Gly Arg Arg Glu Gly His Pro Leu Phe Pro Asn Val Pro  
 -30 -25 -20 -15  
 Arg Cys Leu Phe Leu Asn Ala Arg Leu Ala Gly Thr Leu Cys Gln Leu  
 -10 -5 1  
 Lys Leu Leu Gln Phe Gly Arg Leu Gly Asn Thr Glu Ser His Leu His  
 5 10 15  
 Gly Leu Ala  
 20

<210> 4539  
 <211> 192  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 3.9  
       seq SVCLCPCLNKGQS/EN

<400> 4539  
 Met Phe Ser Cys Cys Ile Ser Val Cys Leu Cys Pro Cys Leu Asn Lys  
                   -15                  -10                  -5  
 Gly Gln Ser Glu Asn Leu Ser Arg Asp Cys Gly His Trp Leu Asn Pro  
                   1                  5                  10  
 His His Arg Arg Leu Trp Pro Phe Gly Arg Arg His Pro Gln Asp Cys  
           15                  20                  25  
 Gly Leu Phe Gln Asp Ser Gln Xaa Tyr Gly Glu Ser Lys Asp Trp Asn  
 30                  35                  40                  45

<210> 4540  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SIGNAL  
 <222> -37...-1  
 <223> score 5.6  
       seq LVASFLMSSVVRT/SS

<400> 4540  
 Met Thr Asn Thr Val Lys Thr Phe Val His His His Leu Leu Met Glu  
           -35                  -30                  -25  
 Asp Pro Arg Leu Ser Leu Gln Lys Leu Val Ala Ser Phe Leu Met Ser  
           -20                  -15                  -10  
 Ser Val Val Arg Thr Ser Ser Leu Glu Glu Asn Val Lys Val His Pro  
 -5                  1                  5                  10  
 Ile Pro Thr

<210> 4541  
 <211> 219  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -18...-1  
 <223> score 3.7  
       seq VCWGHLLPARVST/RS

004220"666T360

<400> 4541  
Met Cys Gly Tyr Trp Val Cys Trp Gly His Leu Leu Pro Ala Arg Val  
                  -15                  -10                  -5  
Ser Thr Arg Ser Ser Glu Gln Pro Arg Val Thr Pro Arg Asp Glu Asp  
          1                  5                  10  
Ala Met Met Ser Ala Ser Leu Leu Thr Trp Arg Tyr Val Thr Phe Met  
15                  20                  25                  30  
Val Pro Met Pro Leu Ser Pro Cys Arg Ser Val Trp Val Cys Phe Arg  
                  35                  40                  45  
Gln Lys Ile Leu Glu Tyr Val Xaa Ala  
          50                  55

<210> 4542  
<211> 375  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -30..-1  
<223> score 13.2  
      seq LLLSTLVIPSAA/AP

<400> 4542  
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val  
-30                  -25                  -20                  -15  
Leu Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro  
                  -10                  -5                  1  
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu  
          5                  10                  15  
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu  
20                  25                  30  
Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly  
35                  40                  45                  50  
Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly  
                  55                  60                  65  
Asn Asn Thr Leu Ser Ser Xaa Leu Gln Ile Asp Xaa Met Thr Asp Asn  
70                  75                  80  
Lys Thr Gly Glu Val Leu Ile Ser Glu Asn Val Val Ala  
85                  90                  95

<210> 4543  
<211> 234  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -23..-1  
<223> score 11.8  
      seq CLFVCLFLSQSFA/FV

004220"666E7550

```
<400> 4543
Met Pro Ser Tyr Lys Val Cys Gly Val Phe Cys Leu Phe Val Cys Leu
      -20      -15      -10
Phe Leu Ser Gln Ser Phe Ala Phe Val Leu Gln Ala Gly Val Gln Trp
      -5      1      5
Arg Asp Leu Cys Ser Leu Gln Pro Gln Leu Pro Arg Phe Gly Pro Ser
10      15      20      25
Ser Cys Leu Ser Leu Pro Ser Gly Trp Asp Cys Arg Arg Pro Pro Pro
      30      35      40
Arg Leu Ala Asn Ser Cys Val Phe Gly Gly Asp Gly Val Ser
      45      50      55
```

```
<210> 4544
<211> 303
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SIGNAL
<222> -19..-1
<223> score 11
      seq SLVLLCLTCSYA/FM
```

```
<400> 4544
Met Trp Thr Leu Lys Ser Ser Leu Val Leu Leu Leu Cys Leu Thr Cys
      -15      -10      -5
Ser Tyr Ala Phe Met Phe Ser Ser Leu Arg Gln Lys Thr Ser Glu Pro
      1      5      10
Gln Gly Lys Val Gln Tyr Gly Glu His Phe Arg Ile Arg Gln Asn Leu
      15      20      25
Pro Glu His Thr Gln Gly Trp Leu Gly Ser Lys Trp Leu Trp Leu Leu
30      35      40      45
Xaa Val Val Val Pro Phe Val Ile Leu Gln Cys Gln Arg Asp Ser Glu
      50      55      60
Lys Asn Lys Glu Gln Ser Pro Pro Gly Leu Arg Gly Gly Gln Leu His
      65      70      75
Ser Pro Leu Lys Lys
      80
```

```
<210> 4545
<211> 240
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SIGNAL
<222> -44..-1
<223> score 3.7
      seq RLLFCVHGDGHA/EN
```

```
<400> 4545
```

Met Lys Thr Thr Ser Ser Met Asp Pro Gly Asp Met Met Arg Glu Ile  
                     -40                    -35                    -30  
 Arg Lys Val Leu Asp Ala Asn Asn Cys Asp Tyr Glu Gln Arg Glu Arg  
                     -25                    -20                    -15  
 Phe Leu Leu Phe Cys Val His Gly Asp Gly His Ala Glu Asn Leu Val  
                     -10                    -5                    1  
 Gln Trp Glu Met Glu Val Cys Lys Leu Pro Arg Leu Ser Leu Asn Gly  
 5                    10                    15                    20  
 Val Arg Phe Lys Arg Ile Ser Gly Thr Ser Ile Ala Phe Xaa Asn Ile  
                     25                    30                    35

<210> 4546  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -30...-1  
 <223> score 4.3  
       seq LLPTLPWLPSTRL/LS

<400> 4546  
 Met Gln Arg Asn Ala Thr Phe Ile His Leu Gln Leu Ala Ile Arg Pro  
 -30                    -25                    -20                    -15  
 Ser Leu Leu Pro Thr Leu Pro Trp Leu Pro Ser Thr Arg Leu Leu Ser  
                     -10                    -5                    1  
 Pro Thr Pro Leu Gly Gln Leu Arg Gly Pro Pro Gly Xaa Gln Arg Ala  
                     5                    10                    15  
 Met Pro Thr Ala His Leu Arg  
       20                    25

<210> 4547  
 <211> 213  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -27...-1  
 <223> score 8.8  
       seq VLLLLPFTTTSLC/EL

<400> 4547  
 Met Lys Val Lys Glu Asp Phe Pro Leu Leu Ser Arg Lys Ser Val Leu  
                     -25                    -20                    -15  
 Leu Leu Leu Pro Phe Thr Thr Thr Ser Leu Cys Glu Leu Gly Phe Ser  
                     -10                    -5                    1                    5  
 Ile Leu Thr Gln Leu Xaa Thr Xaa Xaa Arg Xaa Gly Leu Asn Cys Ala  
                     10                    15                    20  
 Ala Val Met Arg Val Ala Leu Ser Ser Cys Val Pro Asp Trp Asn Glu  
                     25                    30                    35

Xaa Met Asn Arg Gln Ala His  
40

<210> 4548  
<211> 180  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -43...-1  
<223> score 4.7  
seq GIFLVIFCSESFS/LL

<400> 4548  
Met Ile Asn Leu Leu Val Gly Asn Cys Ile Tyr Leu Leu Gly Ala Ile  
                  -40                  -35                  -30  
Arg Ala Ser Cys Met Cys Arg Xaa Met Ser Phe Ala Lys Phe Gly Ile  
          -25                  -20                  -15  
Phe Leu Val Ile Phe Cys Ser Glu Ser Phe Ser Leu Leu Leu Trp Asn  
      -10                  -5                  1                  5  
Phe Ser Ser Ile Tyr Val Lys Thr Phe Trp Pro Val  
          10                  15

<210> 4549  
<211> 192  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -24...-1  
<223> score 7.8  
seq FLLCLCIAYWAST/AV

<400> 4549  
Met Cys Ser Leu Leu Tyr Pro Leu Val Thr Phe Phe Leu Leu Cys Leu  
                  -20                  -15                  -10  
Cys Ile Ala Tyr Trp Ala Ser Thr Ala Val Phe Leu Ser Thr Ser Asn  
          -5                  1                  5  
Glu Ala Val Tyr Lys Ile Phe Asp Asp Ser Pro Cys Pro Phe Thr Ala  
      10                  15                  20  
Lys Thr Cys Asn Pro Glu Thr Phe Pro Ser Ser Asn Glu Pro Arg His  
25                  30                  35                  40

<210> 4550  
<211> 303  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL



<222> -46...-1  
 <223> score 7.8  
 seq LVLLGTRVPLSGG/GP

<400> 4550  
 Met Lys Gln Ser Lys Arg Xaa Met Val Lys Arg Arg Arg Ser Pro Ala  
 -45 -40 -35  
 Leu Gly Glu Glu Arg Phe Ser Pro Ser Ser Ile Leu His Pro Arg Leu  
 -30 -25 -20 -15  
 Pro Leu Val Leu Leu Gly Thr Arg Val Pro Leu Ser Gly Gly Gly Pro  
 -10 -5 1  
 Gly Glu Pro Asp Gln Gly Arg Ser Ala Pro Ser Trp Lys Ser Leu Ala  
 5 10 15  
 Ser Thr His Xaa His Ser Arg Pro Ala Ala Gly Ala Thr Pro Ala Arg  
 20 25 30  
 Pro Ala Thr Gln Ser Gln Leu Gly Pro Phe Ala Pro Pro Leu Pro Gly  
 35 40 45 50  
 Val Arg Pro Ala Pro  
 55

<210> 4551  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -33...-1  
 <223> score 5.4  
 seq AACHTLSLSLTТА/HN

<400> 4551  
 Met Glu Thr Phe Ala Ser Tyr Ser Gly Ile Gly Phe Ile Gln Leu Arg  
 -30 -25 -20  
 Gly Gly Gly Lys Ala Ala Cys His Thr Leu Ser Leu Ser Leu Thr Thr  
 -15 -10 -5  
 Ala His Asn Phe Lys Asp Gly Gly Pro His Ser Asp Thr Trp Pro Cys  
 1 5 10 15  
 Lys Glu Lys Thr Gly Pro Cys  
 20

<210> 4552  
 <211> 174  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -17...-1  
 <223> score 7.5  
 seq FLFLFLXXLIVA/VT

004220"666E1560

<400> 4552

Met Asn Lys His Phe Leu Phe Leu Phe Leu Leu Xaa Xaa Leu Ile Val  
-15 -10 -5  
Ala Val Thr Ser Leu Gln Cys Ile Thr Cys His Leu Arg Thr Arg Thr  
1 5 10 15  
Asp Arg Cys Arg Arg Gly Phe Gly Xaa Cys Thr Ala Gln Lys Gly Glu  
20 25 30  
Ala Cys Met Leu Leu Arg Ile His Gln Arg  
35 40

<210> 4553

<211> 249

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -41...-1

<223> score 3.6

seq LHTSVTLFLLSYC/DC

<400> 4553

Met Lys Ala Ile Lys Lys Ser Leu Thr Glu Glu Glu Tyr Leu Tyr Leu  
-40 -35 -30  
Asp Phe Ser His Gln Thr Glu Gly Cys Ile Phe Pro Leu His Thr Ser  
-25 -20 -15 -10  
Val Thr Leu Phe Leu Leu Ser Tyr Cys Asp Cys Lys Ile Phe Lys Ile  
-5 1 5  
Cys Leu Val Val Thr Lys Glu Val Ser Arg Asp Xaa Ser Leu Leu Arg  
10 15 20  
Asp Asp Leu Ile Gln Asp Val Glu Ile Gln Ile Ile Ser Arg Gln Glu  
25 30 35  
Leu Pro Pro  
40

<210> 4554

<211> 201

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -36...-1

<223> score 5.6

seq SFLLFXXVLKTES/CS

<400> 4554

Met Lys Leu Gly Ala Glu Glu Glu Glu Arg Leu Glu Ser Gly Leu Ser  
-35 -30 -25  
Ser Ser Ile Lys Xaa Xaa Thr Ser Phe Leu Leu Phe Xaa Xaa Val Leu  
-20 -15 -10 -5

Lys Thr Glu Ser Cys Ser Val Ala Gln Ala Gly Leu Gln Trp Cys Asp  
                   1                  5                  10  
 Leu Ser Ser Leu Gln Leu Pro Ala Xaa Trp Val Gln Ser Asp Ser Pro  
           15                  20                  25  
 Ala Ser Ala  
       30

<210> 4555  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -15...-1  
 <223> score 10.9  
       seq LSVCLLLVTLALC/CY

<400> 4555  
 Met Lys Leu Ser Val Cys Leu Leu Leu Val Thr Leu Ala Leu Cys Cys  
 -15                  -10                  -5                  1  
 Tyr Gln Ala Asn Ala Glu Phe Cys Pro Ala Leu Val Ser Glu Leu Leu  
           5                  10                  15  
 Asp Phe Phe Phe Ile Ser Glu Pro Leu Phe Lys Leu Ser Leu Ala Lys  
       20                  25                  30  
 Phe Asp Ala Pro Arg  
       35

<210> 4556  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -36...-1  
 <223> score 4.7  
       seq SCFVPSLVGTALQ/QS

<400> 4556  
 Met Ala Leu His Ile Leu Glu Cys Glu Arg Asn Val Cys Phe Val Ala  
       -35                  -30                  -25  
 Val Arg Gln Pro Ala His Glu Ser Cys Phe Val Pro Ser Leu Val Thr  
 -20                  -15                  -10                  -5  
 Gly Ala Leu Gln Gln Ser Gln Thr Gln His Pro Pro Trp Val Cys Pro  
           1                  5                  10  
 Gln Val Gln Gly Ser Tyr Pro Ser Trp Lys Asn Arg Gly  
       15                  20                  25

<210> 4557  
 <211> 153  
 <212> PRT

004220"666E7560

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -23...-1

<223> score 6.9

seq SLILVCLPIYCRS/LF

<400> 4557

Met Met Gln Met Xaa Xaa Leu Gly Ala Ile Ser Leu Ile Leu Val Cys  
-20 -15 -10  
Leu Pro Ile Tyr Cys Arg Ser Leu Phe Trp Arg Ser Glu Pro Ala Asp  
-5 1 5  
Asp Leu Gln Arg Gln Asp Asn Arg Val Val Thr Gly Leu Lys Lys Gln  
10 15 20 25  
Arg Arg Asn

<210> 4558

<211> 192

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -15...-1

<223> score 3.9

seq ILVFLCRRLLEA/SI

<400> 4558

Met Phe Ile Leu Val Phe Leu Cys Arg Arg Leu Leu Leu Glu Ala Ser  
-15 -10 -5 1  
Ile Gln Leu Phe Cys Ser Thr Ser Ser Arg Thr Arg Phe Leu Glu  
5 10 15  
Met Glu Ser Ile Ser Asp Glu Asp Ala Met Ser Ile Val Glu Met Thr  
20 25 30  
Thr Lys Asp Leu Glu Tyr Tyr Ile Asn Leu Val Asp Lys Met Ala Ala  
35 40 45

<210> 4559

<211> 276

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -44...-1

<223> score 4.8

seq SGLMQMLLLKVSA/HI

<400> 4559

Met Leu Lys Met Asp Glu Ser Thr Leu Leu Arg Glu Ala Gln Glu Leu

004220"666ET560

**Q**uestions **A**nswers

```
<220>
<221> SIGNAL
<222> -24..-1
<223> score 7.5
      seq LISELLLLRSVTS/HN
```

```
<210> 4561
<211> 165
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SIGNAL
<222> -40..-1
<223> score 9.1
      seq RLMSLSCLPPILS/GT
```

2805

15

```
<220>
<221> SIGNAL
<222> -35..-1
<223> score 8.5
      seq FVLFCSVLRRSLA/RS
```

```
<220>
<221> SIGNAL
<222> -34..-1
<223> score 3.8
      seq FHQMALXPGTSRA/QA
```

```
<210> 4564
<211> 165
<212> PRT
<213> Homo sapiens
```

2806

<221> SIGNAL  
 <222> -35...-1  
 <223> score 4.8  
 seq PWVLDIFLTLVFA/LG

<400> 4564  
 Met Glu Asn Leu Pro Phe Pro Leu Lys Leu Leu Ser Ala Ser Ser Leu  
 -35 -30 -25 -20  
 Asn Thr Pro Ser Ser Thr Pro Trp Val Leu Asp Ile Phe Leu Thr Leu  
 -15 -10 -5  
 Val Phe Ala Leu Gly Phe Phe Phe Leu Leu Leu Pro Tyr Phe Ser Tyr  
 1 5 10  
 Leu Arg Cys Asp Asn Pro Pro  
 15 20

<210> 4565  
 <211> 195  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 6.6  
 seq MLMVVLLCQVLLG/GA

<400> 4565  
 Met Ile Pro Gly Asn Arg Met Leu Met Val Val Leu Leu Cys Gln Val  
 -15 -10 -5  
 Leu Leu Gly Gly Ala Ser His Ala Ser Leu Ile Pro Glu Thr Gly Lys  
 1 5 10  
 Lys Lys Val Ala Glu Ile Gln Gly His Ala Gly Gly Arg Arg Ser Gly  
 15 20 25  
 Gln Ser His Glu Leu Leu Xaa Xaa Phe Glu Ala Thr Leu Leu Gln Met  
 30 35 40 45  
 Phe

<210> 4566  
 <211> 171  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -29...-1  
 <223> score 6  
 seq LFMALPPVLSSHG/SR

<400> 4566  
 Met Arg Asp Pro Leu Ala Asp Met Val His Ser Tyr Leu Ser Ser Ser  
 -25 -20 -15

Leu Phe Met Ala Leu Pro Pro Val Leu Ser Ser His Gly Ser Arg Asn  
                   -10                  -5                  1  
 Leu Arg Ile Trp Gly Ser Pro Phe Gly Gly Ala Leu Thr Lys Gly Lys  
       5                                  10                  15  
 Ala Pro Pro Thr Pro Ala Gln Pro Ala  
 20                                  25

<210> 4567  
 <211> 162  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 6.2  
       seq FLFLIIPISRSHG/KV

<400> 4567  
 Met Arg Phe Phe Lys Phe Phe Leu Phe Leu Ile Ile Pro Ile Ser Arg  
                   -15                  -10                  -5  
 Ser His Gly Lys Val Arg Lys His Asn Tyr Ser Arg Pro Gly Ala Val  
                   1                                  5                  10  
 Ala His Ala Cys Asn Pro Ser Thr Leu Gly Gly Gln Gly Lys Val Asp  
       15                                  20                  25  
 Gly Leu Ser Pro Gly Val  
 30                                  35

<210> 4568  
 <211> 171  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -15...-1  
 <223> score 4.7  
       seq RCACFPFFPFAFC/HD

<400> 4568  
 Met Val Arg Cys Ala Cys Phe Pro Phe Phe Pro Phe Ala Phe Cys His  
       -15                                  -10                  -5                  1  
 Asp Cys Lys Phe Leu Gly Ala Ser Gln Ser Cys Phe Leu Leu Ser Arg  
                   5                                  10                  15  
 Gln Asn Cys Val Ser Thr Gly Xaa Pro Ser Ser Lys Ser Asp Ile Asn  
       20                                  25                  30  
 Ser Arg Ser Gly Ser Cys Ser Leu Ala  
       35                                  40

<210> 4569  
 <211> 312  
 <212> PRT

004220"666ET560



<213> Homo sapiens

<220>

<221> SIGNAL

<222> -18...-1

<223> score 3.5

seq ALEVIVTLSETAA/AM

<400> 4569

Met Gln Arg Gln Leu Ala Leu Glu Val Ile Val Thr Leu Ser Glu Thr  
-15 -10 -5  
Ala Ala Ala Met Leu Arg Lys His Thr Asn Ile Val Ala Gln Thr Ile  
1 5 10  
Pro Gln Met Leu Ala Met Met Val Asp Leu Glu Glu Asp Glu Asp Trp  
15 20 25 30  
Ala Asn Ala Asp Glu Leu Glu Asp Asp Asp Phe Asp Ser Asn Ala Val  
35 40 45  
Ala Gly Glu Ser Ala Leu Asp Arg Met Ala Cys Gly Leu Gly Gly Lys  
50 55 60  
Leu Val Leu Pro Met Ile Lys Glu His Ile Met Gln Met Leu Gln Asn  
65 70 75  
Arg Lys Leu Cys Pro Ser Met Leu  
80 85

<210> 4570

<211> 213

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -43...-1

<223> score 6.2

seq LALGIPSITQAWG/LW

<400> 4570

Met Asn Gln Ala Asp Pro Arg Leu Arg Ala Val Cys Leu Trp Thr Leu  
-40 -35 -30  
Thr Ser Ala Ala Met Ser Arg Gly Asp Asn Cys Thr Asp Leu Leu Ala  
-25 -20 -15  
Leu Gly Ile Pro Ser Ile Thr Gln Ala Trp Gly Leu Trp Val Leu Leu  
-10 -5 1 5  
Gly Ala Val Thr Leu Leu Phe Leu Ile Ser Leu Ala Ala His Leu Ser  
10 15 20  
Gln Trp Thr Arg Gly Arg Ser  
25

<210> 4571

<211> 189

<212> PRT

<213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -44...-1  
 <223> score 5.2  
 seq XIYXFNFLRWSLA/LS

<400> 4571  
 Met Ser Leu Tyr Leu Asn Leu Gly Ser Cys Arg Gln His Leu Cys Gly  
                   -40                  -35                  -30  
 Ser Cys Phe His Ile Gln Ser Glu Asn Leu Cys Leu Leu Cys Tyr Xaa  
                   -25                  -20                  -15  
 Ile Tyr Xaa Phe Asn Phe Leu Arg Trp Ser Leu Ala Leu Ser Leu Arg  
                   -10                  -5                  1  
 Leu Glu Cys Ser Gly Thr Ile Pro Ser His Cys Asn Leu Arg Leu  
 5                  10                  15

<210> 4572  
 <211> 255  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -26...-1  
 <223> score 4.9  
 seq FYLFFVVFHILC/HD

<400> 4572  
 Met Val His Phe Cys Val Leu Val Pro Leu Met Thr Ser Phe Tyr Leu  
                   -25                  -20                  -15  
 Phe Phe Val Val Val His Phe Ile Leu Cys His Asp Phe Thr Leu Leu  
                   -10                  -5                  1                  5  
 Val Phe His Phe Ser Ser Leu Lys Tyr Phe Leu Glu Arg Val Ser Phe  
                   10                  15                  20  
 Leu Phe Cys Phe Val Ser Glu Thr Glu Ser Arg Ser Val Val Gln Ala  
                   25                  30                  35  
 Arg Val Gln Trp Cys Asn Leu Gly Ser Leu Gln Pro Leu Pro Leu Gly  
                   40                  45                  50  
 Phe Lys Gln Phe Ser  
 55

<210> 4573  
 <211> 168  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -46...-1  
 <223> score 6.5  
 seq WLFFLMLSLCTPP/DR

004220"666E7550

004220" 06627560

<400> 4573

Met Cys Arg Met Cys Arg Phe Val Thr Trp Ile Asn Val Cys His Gly  
 -45 -40 -35  
 Asp Leu Leu His Arg Ser Ser Arg Arg Leu Gly Val Lys Pro Ser Thr  
 -30 -25 -20 -15  
 His Trp Leu Phe Phe Leu Met Leu Ser Leu Cys Thr Pro Pro Asp Arg  
 -10 -5 1  
 Pro Trp Cys Val Leu Phe Pro Pro  
 5 10

<210> 4574

<211> 162

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -27..-1

<223> score 6.6

seq LAFSFSFPSSFS/SF

<400> 4574

Met Val Ala His Asp Tyr Gln Asn Ile Ile Ser Leu Phe Phe Leu Ala  
 -25 -20 -15  
 Phe Ser Phe Ser Phe Phe Pro Ser Ser Phe Ser Ser Phe Phe Leu Xaa  
 -10 -5 1 5  
 Phe Leu Ser Phe Phe Ser Ser Phe Phe Leu Ser Leu Leu Ser Phe Pro  
 10 15 20  
 Ser Phe Leu Pro Pro Gly  
 25

<210> 4575

<211> 201

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -29..-1

<223> score 8.8

seq VLFCFVFLRQSLA/LS

<400> 4575

Met Asp Glu Glu Leu Val Leu Met Asn Glu Gln Arg Asn Cys Phe Ser  
 -25 -20 -15  
 Val Leu Phe Cys Phe Val Phe Leu Arg Gln Ser Leu Ala Leu Ser Ala  
 -10 -5 1  
 Arg Leu Lys Arg Ser Gly Thr Val Ser Ala His Cys Asn Leu Arg Leu  
 5 10 15  
 Pro Gly Ser Ser Ile Ser Ser Ala Ser Ala Ser Leu Val Ala Gly Ile  
 20 25 30 35

Thr Gly Val

<210> 4576  
<211> 192  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -33...-1  
<223> score 6  
seq LHQACLLLAPSHP/QC

<400> 4576  
Met His Leu Leu His Pro Leu Leu Pro Ile Leu Trp Tyr His His Trp  
                  -30                  -25                  -20  
Gly Leu Gly Phe Leu His Gln Ala Cys Leu Leu Leu Ala Pro Ser His  
                  -15                  -10                  -5  
Pro Gln Cys His Leu Leu Glu Pro Ser His Leu Gly Tyr Pro Gln Pro  
   1                          5                          10                          15  
Cys Pro His His Leu Cys Leu Leu Gly Leu Gln Asp Met Ala Pro His  
                  20                          25                          30

<210> 4577  
<211> 240  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -30...-1  
<223> score 5.4  
seq GLCWACXSSLGSC/EY

<400> 4577  
Met Thr Thr Phe Val Gly Leu Arg Pro Gln Pro Gly Gly Arg Gly Arg  
-30                  -25                  -20                  -15  
Ser Gly Leu Cys Trp Ala Cys Xaa Ser Ser Leu Gly Ser Cys Glu Tyr  
                  -10                  -5                  1  
Ala Cys Phe Pro Gly Met Ser Phe Ser Ile Phe Asn Thr Gln Ala Gly  
   5                          10                          15  
Leu Ser Thr Gly Lys Glu Ser Gly Thr Glu Ala Ser Arg Leu Arg Glu  
   20                          25                          30  
Glu Gly Gly Arg Val Thr Ile Tyr Arg Ala Arg Ser Phe Cys Gly Glu  
35                          40                          45                          50

<210> 4578  
<211> 186  
<212> PRT  
<213> Homo sapiens

<220>

<221> SIGNAL  
 <222> -27...-1  
 <223> score 5  
 seq LSCFYLLAIVSNA/VM

<400> 4578  
 Met Tyr His Ile Leu Phe Ile His Ser Phe Ile Asp Arg Tyr Leu Ser  
           -25                          -20                          -15  
 Cys Phe Tyr Leu Leu Ala Ile Val Ser Asn Ala Val Met Asn Met Gly  
       -10                          -5                          1                          5  
 Val Gln Met Ser Val Leu Ser Pro Cys Phe Ala Phe Val His Ser Ile  
                           10                          15                          20  
 Lys Asn Val Lys Val Leu Cys Phe Leu Leu Phe Phe Leu Phe  
                   25                          30                          35

<210> 4579  
 <211> 171  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -27...-1  
 <223> score 7.6  
 seq LLFLGFLIIAIQT/DV

<400> 4579  
 Met Tyr Val Gly Val Pro Val Ser Pro Gln Pro Arg Gln His Leu Leu  
           -25                          -20                          -15  
 Phe Leu Gly Phe Leu Ile Ile Ala Ile Gln Thr Asp Val Arg Xaa Tyr  
       -10                          -5                          1                          5  
 Leu Ile Val Val Leu Ile Cys Ile Tyr Leu Met Ile Ser Asp Val Glu  
                           10                          15                          20  
 Phe Phe Phe Ile Arg Phe Leu Ala Thr  
                   25                          30

<210> 4580  
 <211> 345  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -46...-1  
 <223> score 9.8  
 seq LLALLQGLSWSFS/LF

<400> 4580  
 Met Val Ser Lys Ile Val His Thr Leu Gly Met Lys Ile Ile Val Lys  
       -45                          -40                          -35  
 Lys Arg Lys Lys Gln Glu Tyr Leu Asn Lys Ser Leu Arg Xaa Met Glu

-30                      -25                      -20                      -15  
 Gln Leu Leu Ala Leu Leu Gln Gly Leu Ser Trp Ser Phe Ser Leu Phe  
                                  -10                      -5                      1  
 Ser Ile Leu Val Gln Val Lys Gln Pro Arg Lys Lys Val Met Ala Cys  
                                  5                      10                      15  
 Lys Thr Ala Phe Asn Lys Thr Gly Phe Gln Glu Val Phe Asp Pro Pro  
                                  20                      25                      30  
 His Tyr Glu Leu Phe Ser Leu Arg Asp Lys Glu Ile Ser Ala Asp Leu  
 35                                   40                                   45                                   50  
 Ala Asp Leu Ser Glu Glu Leu Asp Asn Tyr Gln Lys Met Arg Arg Ser  
                                  55                                   60                                   65  
 Ser Thr Ala

<210> 4581  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -16...-1  
 <223> score 7.5  
       seq LFCLSVCLFEVES/HS

<400> 4581  
 Met Glu Leu Leu Phe Cys Leu Ser Val Cys Leu Phe Glu Val Glu Ser  
                                  -15                      -10                      -5  
 His Ser Val Thr Gln Ala Gly Val Gln Trp His Ser Leu Gly Pro Leu  
 1                                   5                                   10                                   15  
 Asn Ser Leu Pro Pro Gly Phe Lys Arg Phe Ser Cys Leu Ser Leu Ser  
                                  20                                   25                                   30  
 Ser Ser Trp Asp Tyr Arg His Ala Pro Pro Pro Pro Ala  
                                  35                                   40                                   45

<210> 4582  
 <211> 327  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -23...-1  
 <223> score 6.6  
       seq VRLLLXLXLLLIA/LE

<400> 4582  
 Met Arg Arg Ile Ser Leu Thr Ser Ser Pro Val Arg Leu Leu Leu Xaa  
                                  -20                      -15                      -10  
 Leu Xaa Leu Leu Leu Ile Ala Leu Glu Ile Met Val Gly Gly His Ser  
                                  -5                                   1                                   5  
 Leu Cys Phe Asn Phe Thr Ile Lys Ser Leu Ser Arg Pro Gly Gln Pro  
 10                                   15                                   20                                   25

Trp Cys Glu Ala His Val Phe Leu Asn Lys Asn Leu Phe Leu Gln Tyr  
 30 35 40  
 Asn Ser Asp Asn Asn Met Val Lys Pro Leu Gly Leu Leu Gly Lys Lys  
 45 50 55  
 Val Tyr Ala Thr Ser Thr Trp Gly Glu Leu Thr Gln Thr Leu Gly Glu  
 60 65 70  
 Val Gly Arg Asp Leu Arg Met Leu Leu Cys Asp Ile Lys  
 75 80 85

<210> 4583  
 <211> 156  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -48...-1  
 <223> score 7.4  
 seq SLMFLPIFFPSFS/SY

<400> 4583  
 Met Ser His Cys Ala Trp Pro Ser Val Tyr Phe Leu Lys Gly Leu Ser  
 -45 -40 -35  
 Cys Leu Phe Trp Thr Ser Asp Arg Leu Phe Gln Tyr Gly Lys Phe Ser  
 -30 -25 -20  
 Cys Ile Leu Ser Leu Met Phe Leu Pro Ile Phe Phe Pro Ser Phe Ser  
 -15 -10 -5  
 Ser Tyr Asn Ile  
 1

<210> 4584  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -28...-1  
 <223> score 4.5  
 seq RFLSLSAADGXDX/SX

<400> 4584  
 Met Val Leu Thr Leu Gly Glu Ser Trp Pro Val Leu Val Gly Arg Arg  
 -25 -20 -15  
 Phe Leu Ser Leu Ser Ala Ala Asp Gly Xaa Asp Xaa Ser Xaa Asp Ser  
 -10 -5 1  
 Trp Asp Val Glu Arg Val Ala Glu Trp Pro Trp Leu Ser Gly Thr Ile  
 5 10 15 20  
 Arg Ala Val Ser His Thr Asp Val Thr Lys Lys Asp Leu  
 25 30

<210> 4585

<211> 174  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -49..-1  
 <223> score 7  
 seq FGLFVSLVFLGQA/FT

<400> 4585  
 Met Ile Phe Leu Tyr Arg Tyr Cys Arg Met Leu Glu Glu Gly Ser Phe  
                     -45                    -40                    -35  
 Arg Gly Arg Thr Ala Asp Phe Val Phe Met Phe Leu Phe Gly Gly Phe  
                     -30                    -25                    -20  
 Leu Met Thr Leu Phe Gly Leu Phe Val Ser Leu Val Phe Leu Gly Gln  
                     -15                    -10                    -5  
 Ala Phe Thr Ile Met Leu Val Tyr Val Trp  
       1                                    5

<210> 4586  
 <211> 300  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -18..-1  
 <223> score 15.9  
 seq LLCCLVLLTGVR/SP

<400> 4586  
 Met His Ser Ser Ala Leu Leu Cys Cys Leu Val Leu Leu Thr Gly Val  
                     -15                    -10                    -5  
 Arg Ala Ser Pro Gly Gln Gly Thr Gln Ser Glu Asn Ser Cys Thr His  
       1                                    5                    10  
 Phe Pro Gly Asn Leu Pro Asn Met Leu Arg Asp Leu Arg Asp Ala Phe  
 15                    20                    25                    30  
 Ser Arg Val Lys Thr Phe Phe Gln Met Lys Asp Gln Leu Asp Asn Leu  
                     35                    40                    45  
 Leu Leu Lys Glu Ser Leu Leu Glu Asp Phe Lys Gly Tyr Leu Gly Cys  
                     50                    55                    60  
 Gln Ala Leu Ser Glu Met Ile Gln Phe Tyr Leu Glu Glu Val Met Pro  
       65                                    70                    75  
 Lys Leu Arg Thr  
       80

<210> 4587  
 <211> 171  
 <212> PRT  
 <213> Homo sapiens

004220" 5666T560



**THE UNIVERSITY OF CHICAGO**

**THE UNIVERSITY OF CHICAGO**

[illegible][illegible]

**THE UNIVERSITY OF CHICAGO**

**THE UNIVERSITY OF CHICAGO**

**THE UNIVERSITY OF CHICAGO**

**THE UNIVERSITY OF CHICAGO**

Ser Leu Ser Ala Gly Val Ser Gly Glu Asp Lys Thr Glu Ile Leu Asn  
 -5 1 5  
 Pro Thr Pro Xaa Met Ala Lys Ser Leu Thr Ile Asp Cys Leu Glu Leu  
 10 15 20  
 Ala Leu Pro Pro Glu Leu Ala Phe Gln Leu Asn Glu Leu Phe Gly Pro  
 25 30 35 40  
 Val Gly Ile Asp Ser Gly Ser Leu  
 45

<210> 4590  
 <211> 324  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -23...-1  
 <223> score 10  
 seq PLLGLLLSLPAGA/DV

<400> 4590  
 Met Pro Ser Trp Ile Gly Ala Val Ile Leu Pro Leu Leu Gly Leu Leu  
 -20 -15 -10  
 Leu Ser Leu Pro Ala Gly Ala Asp Val Lys Ala Arg Ser Cys Gly Glu  
 -5 1 5  
 Val Arg Gln Ala Tyr Gly Ala Lys Gly Phe Ser Leu Ala Asp Ile Pro  
 10 15 20 25  
 Tyr Gln Glu Ile Ala Xaa Glu His Leu Arg Ile Cys Pro Gln Glu Tyr  
 30 35 40  
 Thr Cys Cys Thr Thr Glu Met Glu Asp Lys Leu Ser Gln Gln Ser Lys  
 45 50 55  
 Leu Glu Phe Glu Asn Leu Val Glu Glu Thr Ser His Phe Val Arg Thr  
 60 65 70  
 Thr Phe Val Ser Arg His Lys Lys Phe Asp Gly Arg  
 75 80 85

<210> 4591  
 <211> 210  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -25...-1  
 <223> score 4.6  
 seq LPTLLLLPVGAPG/KK

<400> 4591  
 Met Val Leu Gly Ala Leu Asn Leu Pro Ser Gln Glu Leu Pro Thr Leu  
 -25 -20 -15 -10  
 Leu Leu Leu Pro Val Gly Ala Pro Gly Lys Lys Lys Gly Met Glu Gly  
 -5 1 5

Lys Thr Pro Leu Asp Leu Phe Ala His Phe Gly Pro Glu Pro Gly Asp  
 10 15 20  
 His Ser Asp Pro Leu Pro Pro Ser Ala Pro Ser Pro Thr Arg Glu Gly  
 25 30 35  
 Ala Leu Thr Pro Pro Pro  
 40 45

<210> 4592

<211> 288

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -38..-1

<223> score 4.8

seq MLMLAQSNPQLFA/LM

<400> 4592

Met Glu Gln Cys Ala Ser Leu Glu Glu Leu Arg Leu Ala Phe Arg Pro  
 -35 -30 -25  
 Gln Met Asp Pro Arg Gln Leu Ser Met Met Leu Met Leu Ala Gln Ser  
 -20 -15 -10  
 Asn Pro Gln Leu Phe Ala Leu Met Gly Thr Arg Ala Gly Ile Ala Arg  
 -5 1 5 10  
 Glu Leu Glu Arg Val Glu Xaa Gln Ser Arg Leu Glu Gln Leu Ser Ala  
 15 20 25  
 Ala Glu Leu Gln Ser Arg Asn Gln Gly His Trp Ala Asp Trp Leu Gln  
 30 35 40  
 Ala Tyr Arg Ala Arg Leu Asp Lys Asp Leu Glu Gly Ala Gly Asp Xaa  
 45 50 55

<210> 4593

<211> 300

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -39..-1

<223> score 5.4

seq ILLTSCFYTLVSS/TF

<400> 4593

Met Ile Ser Ser Cys Gly Val Lys Tyr Leu Phe Ser His Ala Ser Leu  
 -35 -30 -25  
 Phe Phe Met Val Gly Ser Thr Gly Ser Leu Ile Leu Leu Thr Ser Cys  
 -20 -15 -10  
 Phe Tyr Thr Leu Val Ser Ser Thr Phe Leu Gln Lys Leu Ser Ser Leu  
 -5 1 5  
 Leu Leu Ile Leu Phe Thr Glu Thr Ser Val Leu Met Leu Lys Thr Phe  
 10 15 20 25

Val Ala Asn Ser Cys Cys Xaa Leu Trp Ser His Asn Cys Ile Asn Phe  
                           30                          35                          40  
 Phe Lys Lys Val Xaa Pro Ser Tyr Cys Xaa Ser Ser Leu Leu Phe Leu  
                           45                          50                          55  
 Ala Val Pro Arg  
                           60

<210> 4594  
 <211> 174  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -15...-1  
 <223> score 4.5  
       seq LLGAAVAALGRG/RA

<400> 4594  
 Met Arg Leu Leu Gly Ala Ala Ala Val Ala Ala Leu Gly Arg Gly Arg  
 -15                          -10                          -5                          1  
 Ala Pro Ala Ser Leu Gly Trp Gln Arg Lys Gln Val Asn Trp Lys Ala  
                           5                          10                          15  
 Cys Arg Trp Ser Ser Ser Gly Val Ile Pro Asn Glu Lys Ile Arg Asn  
                           20                          25                          30  
 Ile Gly Ile Ser Ala His Ile Asp Ser Gly  
                           35                          40

<210> 4595  
 <211> 378  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -15...-1  
 <223> score 4  
       seq PTCATCAHPVTLA/QR

<400> 4595  
 Met Gly Pro Thr Cys Ala Thr Cys Ala His Pro Val Thr Leu Ala Gln  
 -15                          -10                          -5                          1  
 Arg Pro Trp Pro Leu Ile Ala Gln Arg Arg Phe Leu Lys Ile Pro Ala  
                           5                          10                          15  
 Ala Leu Asn Arg Ala Ala Phe Ala Ala Ala Pro Ala Val Gly Pro Cys  
                           20                          25                          30  
 Phe Arg Arg Arg Pro Gly Arg Gly Leu Thr Thr Arg Leu Gly Ser Leu  
                           35                          40                          45  
 Ala Pro Pro Phe Pro Trp Pro Glu His Pro Cys Gly Xaa Pro Leu Leu  
                           50                          55                          60                          65  
 Leu Arg Arg Arg Gln Ser Leu Cys Thr Leu Val Phe Arg Gly Gln Lys  
                           70                          75                          80

Gly Gln Lys Gly His Phe Gly Ala Thr Arg Ala Val Phe Thr Cys Val  
                   85                                  90                                  95  
 Cys Asn Gly Gly Arg Gly Ala Pro Gly Phe Pro Leu Phe Ser  
           100                                  105                                  110

<210> 4596  
 <211> 189  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -39...-1  
 <223> score 4.6  
       seq AFLSCLAFLVLDT/QE

<400> 4596  
 Met Glu Ser Pro Gln Leu His Cys Ile Leu Asn Ser Asn Ser Val Ala  
                   -35                                  -30                                  -25  
 Cys Ser Phe Ala Val Gly Ala Gly Phe Leu Ala Phe Leu Ser Cys Leu  
                   -20                                  -15                                  -10  
 Ala Phe Leu Val Leu Asp Thr Gln Glu Thr Arg Ile Ala Gly Thr Arg  
                   -5                                  1                                  5  
 Phe Lys Thr Ala Phe Gln Leu Leu Asp Xaa Ile Leu Ala Val Leu  
 10                                  15                                  20

<210> 4597  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -26...-1  
 <223> score 6.3  
       seq RQLLLPLPPFSFP/AP

<400> 4597  
 Met Pro Gln Gln Pro Val Glu Gln Gly Ser Pro Leu Leu Arg Gln Leu  
           -25                                  -20                                  -15  
 Leu Leu Pro Leu Pro Pro Phe Ser Phe Pro Ala Pro Ser Pro Cys Pro  
 -10                                  -5                                  1                                  5  
 Ser Trp Pro Val Ala Leu Gly Ser His Gly Val Ala Tyr Trp Gly Ser  
           10                                  15                                  20  
 Cys Ser Leu Gly His  
           25

<210> 4598  
 <211> 204  
 <212> PRT  
 <213> Homo sapiens

004220" 666E7560

<220>  
 <221> SIGNAL  
 <222> -40...-1  
 <223> score 3.9  
 seq CVYVCVCISVCAC/VY

<400> 4598  
 Met Arg Val Cys Ala His Gln Cys Leu His Val Cys Xaa Cys Val Tyr  
 -40 -35 -30 -25  
 Val Cys Xaa Cys Ala Arg Ile Cys Val Cys Ala Cys Val Tyr Val Cys  
 -20 -15 -10  
 Val Cys Ile Ser Val Cys Ala Cys Val Tyr Val Cys Val His Leu Cys  
 -5 1 5  
 Val Cys Ala Cys Val His Ala Cys Val Cys Val Cys Ala Cys Val His  
 10 15 20  
 Leu Cys Val Cys  
 25

<210> 4599  
 <211> 168  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -16...-1  
 <223> score 11.3  
 seq PLLLSSLLGGSQA/MD

<400> 4599  
 Met Leu Leu Pro Leu Leu Leu Ser Ser Leu Leu Gly Gly Ser Gln Ala  
 -15 -10 -5  
 Met Asp Gly Arg Phe Trp Ile Arg Val Gln Glu Ser Val Met Val Pro  
 1 5 10 15  
 Glu Gly Leu Cys Ile Ser Val Xaa Leu Leu Phe Leu Leu Pro Pro Thr  
 20 25 30  
 Arg Leu Asp Arg Val Tyr Pro Ser  
 35 40

<210> 4600  
 <211> 198  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -37...-1  
 <223> score 4.5  
 seq CTTLLVYVRYAWQ/DD

<400> 4600

Met Leu Ile Thr Arg Leu Gln Ser Gly Ile Asp Phe Ala Ile Gln Leu  
 -35 -30 -25  
 Asp Glu Ser Thr Asp Ile Gly Ser Cys Thr Thr Leu Leu Val Tyr Val  
 -20 -15 -10  
 Arg Tyr Ala Trp Gln Asp Asp Phe Leu Glu Asp Phe Leu Cys Phe Leu  
 -5 1 5 10  
 Asn Leu Thr Ser His Leu Ser Gly Leu Asp Ile Phe Thr Glu Leu Glu  
 15 20 25  
 Arg Arg

<210> 4601  
 <211> 276  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -34...-1  
 <223> score 5.2  
 seq LWSSCWLAPLADG/ML

<400> 4601  
 Met Val Gly Gly Leu Asp Pro Pro Gly Arg Arg Arg Phe Gln Lys Gly  
 -30 -25 -20  
 Phe Asp Trp Arg Asn Leu Trp Ser Ser Cys Trp Leu Ala Pro Leu Ala  
 -15 -10 -5  
 Asp Gly Met Leu Arg Tyr Met Gly Gln Xaa Gln Arg Xaa Ala Ser Asn  
 1 5 10  
 Pro Glu Gly Ser Thr Leu Glu Ala Arg Pro Pro Ala Pro Xaa Ala Ser  
 15 20 25 30  
 Val Ser Pro Ser Val Xaa Xaa Pro His Arg Pro Trp Ala Ala Lys Met  
 35 40 45  
 Glu Thr Val Ser Pro Ala Thr Ser Xaa Ile Ala Gly  
 50 55

<210> 4602  
 <211> 156  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -47...-1  
 <223> score 3.6  
 seq FLCLSLPRTGITG/MC

<400> 4602  
 Met Val Glu Lys Lys Thr Ser Gly Ser Leu Ser Val Ala Gln Ala Gly  
 -45 -40 -35  
 Met Gln Trp Arg Asp Leu Ser Ser Leu Gln Pro Pro Pro Gly Phe  
 -30 -25 -20  
 Lys Arg Phe Leu Cys Leu Ser Leu Pro Arg Thr Gly Ile Thr Gly Met

**THE UNIVERSITY OF CHICAGO**

```
<220>
<221> SIGNAL
<222> -40..-1
<223> score 4.2
      seq LLSGLCVAVCAOX/GH
```

```
<210> 4604
<211> 171
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SIGNAL
<222> -44..-1
<223> score 4
      seq XLMVAMRCLGASP/XP
```

```
<210> 4605
<211> 219
<212> PRT
<213> Homo sapiens
```

2824



<221> SIGNAL  
 <222> -14...-1  
 <223> score 3.8  
 seq LDSLLALGGLVLL/RD

<400> 4605  
 Met Leu Asp Ser Leu Leu Ala Leu Gly Gly Leu Val Leu Leu Arg Asp  
                   -10                  -5                  1  
 Ser Val Glu Trp Glu Gly Arg Ser Leu Leu Lys Ala Leu Xaa Lys Lys  
           5                  10                  15  
 Ser Ala Leu Cys Gly Glu Gln Val His Ile Leu Gly Cys Glu Val Ser  
       20                  25                  30  
 Xaa Glu Glu Phe Arg Glu Xaa Phe Asp Ser Xaa Ile Xaa Asn Arg Leu  
 35                  40                  45                  50  
 Val Tyr His Xaa Phe Phe Arg Asp Pro  
                   55

<210> 4606  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -22...-1  
 <223> score 3.8  
 seq FGLLLGNLCSVKS/TE

<400> 4606  
 Met Thr Leu Ala Met Tyr Lys Thr Tyr Phe Gly Leu Leu Leu Gly Asn  
           -20                  -15                  -10  
 Leu Cys Ser Val Lys Ser Thr Glu Xaa Leu Leu Pro Leu Leu Ala Ser  
       -5                  1                  5                  10  
 Ser Thr Leu Ser Pro Phe Ile Ser Lys Met Glu Ser Cys Ser Cys Tyr  
           15                  20                  25  
 Pro Gly Trp Ser Ala Met Ala Gln Ser Arg Leu Thr Ala  
       30                  35

<210> 4607  
 <211> 342  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -38...-1  
 <223> score 3.5  
 seq LAMMNSILRGLNS/KQ

<400> 4607  
 Met Ser Ser Met Trp Ser Glu Tyr Thr Ile Gly Gly Val Lys Ile Tyr

-35                      -30                      -25  
 Phe Pro Tyr Lys Ala Tyr Pro Ser Gln Leu Ala Met Met Asn Ser Ile  
          -20                      -15                      -10  
 Leu Arg Gly Leu Asn Ser Lys Gln His Cys Leu Leu Glu Ser Pro Thr  
          -5                      1                      5                      10  
 Gly Ser Gly Lys Ser Leu Ala Leu Leu Cys Ser Ala Leu Ala Trp Gln  
                          15                      20                      25  
 Gln Ser Leu Ser Gly Lys Pro Ala Asp Glu Gly Val Ser Glu Lys Ala  
                          30                      35                      40  
 Glu Val Gln Leu Ser Cys Cys Cys Ala Cys His Ser Lys Asp Phe Thr  
                          45                      50                      55  
 Asn Asn Asp Met Asn Gln Gly Thr Ser Arg His Phe Asn Tyr Pro Ser  
                          60                      65                      70  
 Thr Pro  
 75

<210> 4608  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -45...-1  
 <223> score 5  
       seq FSMLARLVLSWP/QV

<400> 4608  
 Met Arg Leu Ser Lys Gly Asp Leu Gly Ser Arg Glu Ala Met Arg Arg  
          -45                      -40                      -35                      -30  
 Val Leu Cys Phe Pro Met Gly Glu Glu Trp Leu Tyr Glu Gln Trp Gly  
                          -25                      -20                      -15  
 Phe Ser Met Leu Ala Arg Leu Val Leu Asn Ser Trp Pro Gln Val Ile  
                          -10                      -5                      1  
 Cys Pro Pro Leu Pro Pro Ser  
          5                      10

<210> 4609  
 <211> 318  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -34...-1  
 <223> score 3.6  
       seq XLALSLRLXCXGX/IS

<400> 4609  
 Met Phe Xaa Leu Cys Phe Leu Thr Val Xaa Phe Ile Ile Ser Asn Leu  
                          -30                      -25                      -20  
 Phe Phe Leu Xaa Arg Xaa Leu Ala Leu Ser Leu Arg Leu Xaa Cys Xaa



25

30

35

<210> 4612  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -35...-1  
 <223> score 4.9  
 seq LFIFIGSLQPVP/RF

<400> 4612  
 Met Leu Leu His Tyr Leu Lys Leu Lys Gly Asp Gln Trp Lys Leu Ser  
 -35 -30 -25 -20  
 Ser Val Ser Thr Leu Ile Leu Phe Ile Phe Ile Gly Ser Leu Gln Pro  
 -15 -10 -5  
 Val Pro Thr Arg Phe Lys Arg Phe Ser Cys Leu Xaa His Leu Ser Ser  
 1 5 10  
 Arg Asp His Arg Gln Ala Leu  
 15 20

<210> 4613  
 <211> 357  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -18...-1  
 <223> score 11  
 seq LLLWASLLTGAWP/SF

<400> 4613  
 Met Leu Val Ala Gly Leu Leu Leu Trp Ala Ser Leu Leu Thr Gly Ala  
 -15 -10 -5  
 Trp Pro Ser Phe Pro Thr Gln Asp His Leu Pro Ala Thr Pro Arg Val  
 1 5 10  
 Arg Leu Ser Phe Lys Glu Leu Lys Ala Thr Gly Thr Ala His Phe Phe  
 15 20 25 30  
 Asn Phe Leu Leu Asn Thr Thr Asp Tyr Arg Ile Leu Leu Lys Asp Glu  
 35 40 45  
 Asp His Asp Arg Met Tyr Val Gly Ser Lys Asp Tyr Val Leu Ser Leu  
 50 55 60  
 Asp Leu His Asp Ile Asn Arg Glu Pro Leu Ile Ile His Trp Ala Ala  
 65 70 75  
 Ser Pro Gln Arg Ile Glu Glu Cys Val Leu Ser Gly Lys Asp Val Asn  
 80 85 90  
 Gly Glu Cys Gly Asn Phe Val  
 95 100

<210> 4614  
 <211> 195  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -22..-1  
 <223> score 4.2  
 seq TAYWLSFMSWAQS/SS

<400> 4614  
 Met Pro Pro Gln Ser Cys Cys Ser Lys Thr Ala Tyr Trp Leu Ser Phe  
           -20                      -15                      -10  
 Met Ser Trp Ala Gln Ser Ser Ser Phe Gly Ser Arg Xaa Glu Ser Thr  
       -5                      1                      5                      10  
 Ser Pro Cys Thr Asp His Cys Ser Gly Pro Arg Glu Glu Gln Leu Cys  
                       15                      20                      25  
 Ser Ser Arg Val Phe His Cys Ile Thr His Pro Asn Gly Arg Ile His  
                       30                      35                      40  
 Arg

<210> 4615  
 <211> 219  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -22..-1  
 <223> score 6.2  
 seq ILVLTLNVNGLNA/SN

<400> 4615  
 Met Thr Glu Ser Asn Ser His Ile Ser Ile Leu Val Leu Thr Leu Asn  
           -20                      -15                      -10  
 Val Asn Gly Leu Asn Ala Ser Asn Lys Arg His Arg Val Ala Ser Trp  
       -5                      1                      5                      10  
 Ile Met Lys Gln Asn Thr Met Val Cys Cys Ile Gln Glu Thr His Pro  
                       15                      20                      25  
 Pro Cys Asn Asp Ala His Arg Leu Lys Val Lys Glu Trp Arg Lys Ile  
                       30                      35                      40  
 Cys Gln Ala Asn Arg Lys Gln Lys Lys  
           45                      50

<210> 4616  
 <211> 261  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL

**THE UNIVERSITY OF CHICAGO**

```
<210> 4617
<211> 300
<212> PRT
<213> Homo sapiens
```

```

<400> 4617
Met Met Gln Gly Glu Ala His Pro Ser Ala Ser Leu Ile Asp Arg Thr
-40                               -35                               -30                               -25
Ile Lys Met Arg Lys Glu Thr Glu Ala Arg Lys Val Val Leu Ala Trp
                               -20                               -15                               -10
Gly Leu Leu Asn Val Ser Met Ala Gly Met Ile Tyr Thr Glu Met Thr
                               -5                               1                               5
Gly Lys Leu Ile Ser Ser Tyr Tyr Asn Val Thr Tyr Trp Pro Leu Trp
                               10                               15                               20
Tyr Xaa Glu Leu Ala Leu Ala Ser Leu Phe Ser Leu Asn Ala Leu Phe
25                               30                               35                               40
Asp Phe Trp Arg Tyr Phe Lys Tyr Thr Val Ala Pro Thr Ser Leu Val
                               45                               50                               55
Val Ser Pro Gly
                               60

```

```
<220>
<221> SIGNAL
```

[illegible]

```
<210> 4619
<211> 195
<212> PRT
<213> Homo sapiens
```

```
<400> 4619
Met Arg Phe Gly Trp Arg His Arg Ala Lys Thr Ile Leu Ser Leu Phe
          -20                      -15                -10
Cys Trp Asp Thr Glu Ser Leu Ala Pro Ser His Thr Leu Met Met Ile
           -5                          1              5
Asn Leu Tyr Val Tyr Leu Pro Lys Lys Met Val Val Phe Glu Trp Arg
      10                        15            20
Pro Ser Gly Gln Glu Asn Asn His Ile Leu Pro Glu Ile Met Ser Thr
   25             30        35               40
Leu
```

```
<210> 4620
<211> 258
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SIGNAL
<222> -44..-1
<223> score 3.5
      seq AVVMLMVAIFAGT/MQ
```

2831

			-25					-20					-15				
Val	Val	Met	Leu	Met	Val	Ala	Ile	Phe	Ala	Gly	Thr	Met	Gln	Leu	Thr		
		-10						-5					1				
Lys	Asp	Gln	Val	Val	Cys	Leu	Pro	Val	Leu	Pro	Ser	Pro	Val	Asn	Ser		
5					10					15					20		
Xaa	Xaa	His	Thr	Pro	Pro	Gly	Asn	Ala	Glu	Val	Thr	Thr	Asn	Ile	Pro		
				25					30					35			
Lys	Met	Glu	Ala	Ala	Thr												
				40													

<210> 4621  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -33...-1  
 <223> score 3.8  
 seq WSLALSSRLECNG/AI

<400> 4621																	
Met	Ser	Ser	Cys	Arg	Lys	Tyr	Ser	Ser	Thr	Asp	Val	Ala	Asp	Phe	Ala		
			-30					-25					-20				
Pro	Trp	Gln	Lys	Trp	Ser	Leu	Ala	Leu	Ser	Ser	Arg	Leu	Glu	Cys	Asn		
		-15				-10					-5						
Gly	Ala	Ile	Ser	Ala	Tyr	Cys	Asn	Leu	Cys	Phe	Pro	Gly	Ser	Ser	Glu		
1				5					10						15		
Ser	Ala	Ser	Arg	Val	Gln	Ala	Ile	Leu	Leu	Pro	Gln						
				20				25									

<210> 4622  
 <211> 168  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -23...-1  
 <223> score 6.2  
 seq LCNLSIFFCCSVS/QP

<400> 4622																	
Met	Val	Ile	Ser	Phe	Leu	Leu	Ile	Cys	Lys	Leu	Cys	Asn	Leu	Ser	Ile		
		-20					-15					-10					
Phe	Phe	Cys	Cys	Ser	Val	Ser	Gln	Pro	Leu	Cys	Gln	Ile	Lys	Asn	His		
		-5				1				5							
Pro	Gly	Gln	Thr	Gln	Trp	Leu	Met	Leu	Val	Ile	Pro	Thr	Leu	Trp	Glu		
10				15					20						25		
Ala	Lys	Val	Gly	Glu	Leu	Leu	Glu										
				30													



<210> 4623  
 <211> 240  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -14...-1  
 <223> score 5.7  
 seq NVLIIVFVAFAG/FL

<400> 4623  
 Met Asn Val Leu Ile Ile Val Phe Val Ala Phe Ala Phe Gly Phe Leu  
                           -10                          -5                          1  
 Val Met Lys Ser Leu Leu Lys Pro Met Ser Arg Arg Val Phe Leu Met  
           5  10                          15  
 Leu Ser Ser Arg Ile Phe Met Val Ser Gly Leu Arg Phe Lys Ser Leu  
       20  25                          30  
 Ile His Leu Glu Leu Ile Phe Val Tyr Lys Leu Arg Asp Glu Asp Pro  
 35  40                          45                          50  
 Val Ser Phe Phe Tyr Met Trp Leu Ala Asn Tyr Pro Ser Thr Ile Cys  
                           55  60                          65

<210> 4624  
 <211> 171  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 4.2  
 seq LLSLAAYLSGPHQ/EP

<400> 4624  
 Met Met Asp Leu Arg Pro Leu Leu Ser Leu Ala Ala Tyr Leu Ser Gly  
                           -15                          -10                          -5  
 Pro His Gln Glu Pro Ser Val Pro Thr Arg Asp Gly Asp Val Asn Asn  
           1  5                          10  
 Leu Pro Lys Pro Asn Pro Ala Arg Ser Val Lys Gln Gly Gly Ile Trp  
       15  20                          25  
 Lys Ala Glu Gln Glu Arg Val Glu Val  
 30  35

<210> 4625  
 <211> 294  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -29...-1

<223> score 5.8  
seq LHAXAGAAASVIA/AD

<400> 4625  
Met Ser Leu Arg Leu Asp Thr Thr Pro Ser Cys Asn Ser Ala Arg Pro  
                  -25                  -20                  -15  
Leu His Ala Xaa Ala Gly Ala Ala Ala Ser Val Ile Ala Ala Asp Cys  
                  -10                  -5                  1  
Ser Gly Phe Leu His Gln Arg Thr Thr Lys Arg Asn Leu Ala Lys Gly  
5                  10                  15  
Lys Glu Glu Ser Leu Asp Ser Asp Leu Tyr Ala Glu Leu Arg Cys Met  
20                  25                  30                  35  
Cys Ile Lys Thr Thr Ser Gly Ile His Pro Lys Asn Ile Gln Ser Leu  
                  40                  45                  50  
Glu Val Ile Gly Lys Gly Thr His Cys Asn Gln Val Glu Val Ile Ala  
55                  60                  65  
Thr Leu

<210> 4626  
<211> 303  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -27..-1  
<223> score 5.9  
seq ALALAXAPDLAQA/PL

<400> 4626  
Met Asp Ser Ala Ala Cys Ala Ala Ala Ala Thr Pro Val Pro Ala Leu  
                  -25                  -20                  -15  
Ala Leu Ala Xaa Ala Pro Asp Leu Ala Gln Ala Pro Leu Ala Leu Pro  
                  -10                  -5                  1                  5  
Gly Leu Leu Ser Pro Ser Cys Leu Leu Ser Ser Gly Gln Glu Val Asn  
                  10                  15                  20  
Gly Ser Glu Arg Gly Thr Cys Leu Trp Arg Pro Trp Leu Ser Ser Thr  
                  25                  30                  35  
Asn Asp Ser Pro Arg Gln Met Arg Lys Leu Val Asp Leu Ala Ala Gly  
                  40                  45                  50  
Gly Ala Thr Ala Ala Glu Val Thr Lys Ala Glu Ser Xaa Xaa His His  
55                  60                  65  
Pro Val Arg Leu Phe  
70

<210> 4627  
<211> 297  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL

004220" 66667560

<222> -41...-1  
 <223> score 6.5  
 seq IAVLVLYFLFVLA/VG

<400> 4627  
 Met Glu Ser Gly Thr Ser Ser Pro Gln Pro Pro Gln Leu Asp Pro Leu  
           -40                          -35                          -30  
 Asp Ala Phe Pro Gln Lys Gly Leu Glu Pro Gly Asp Ile Ala Val Leu  
           -25                          -20                          -15                          -10  
 Val Leu Tyr Phe Leu Phe Val Leu Ala Val Gly Leu Trp Ser Thr Val  
                                   -5                                  1                                  5  
 Lys Xaa Lys Arg Asp Thr Val Lys Gly Tyr Phe Leu Ala Gly Gly Asp  
           10                                  15                                  20  
 Met Val Trp Trp Pro Val Gly Xaa Ser Leu Phe Ala Ser Asn Val Gly  
           25                                  30                                  35  
 Ser Gly His Phe Ile Gly Leu Ala Gly Ser Gly Ala Ala Thr Gly Ile  
           40                                  45                                  50                                  55  
 Ser Val Ser

<210> 4628  
 <211> 225  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -25...-1  
 <223> score 4.8  
 seq LWFPSMLFSLSL/SN

<400> 4628  
 Met Thr Gln Ala Gly Gln Ser Ser Gly Cys Thr Ala Leu Trp Phe Pro  
           -25                          -20                          -15                          -10  
 Ser Met Leu Phe Ser Leu Ser Leu Leu Ser Asn Leu Asn Gln Ile Gly  
                                   -5                                  1                                  5  
 Ser Ser His Leu Asp Arg Pro His Ile Pro Gly Gln Ser Ala Gln Leu  
           10                                  15                                  20  
 Phe Ile Tyr Gln Met Ser Ser Gln Gln Leu Gln Gln Pro Ser Ala  
           25                                  30                                  35  
 Asn Lys Lys Ala Gly Lys Ile Xaa Asn Thr Pro  
           40                                  45                                  50

<210> 4629  
 <211> 252  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -31...-1  
 <223> score 3.6  
 seq LFIYLVFVECLLC/TR

004220"666E7560

004220"666E430

<400> 4629

Met Gly Ile Asp Ile Phe Tyr Pro Ser His Ile Pro Asp Phe His Pro  
 -30 -25 -20  
 Ile His Leu Phe Ile Tyr Leu Val Phe Val Glu Cys Leu Leu Cys Thr  
 -15 -10 -5 1  
 Arg Asn Xaa Xaa Xaa Leu Ser Xaa Phe Asn Cys Asp Asn Ala Gln Ile  
 5 10 15  
 Ile Phe Thr Thr Gly Ser Ser Ser Ser Gly Gly Asn Lys Pro Phe Lys  
 20 25 30  
 Ser Ser Leu Cys Thr Val His Arg Gly Gln Glu Arg Glu Arg Ile Glu  
 35 40 45  
 Cys Gln Gly Asn  
 50

<210> 4630

<211> 171

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -44..-1

<223> score 6.9

seq LNLLSSWSSMAQS/RL

<400> 4630

Met Glu Pro Cys Ser Val Thr Gln Ala Gly Val Gln Trp His Asn Leu  
 -40 -35 -30  
 Asp Ser Leu Gln Pro Pro Ser Pro Arg Phe Lys Leu Phe Ser Cys Leu  
 -25 -20 -15  
 Asn Leu Leu Ser Ser Trp Ser Ser Met Ala Gln Ser Arg Leu Thr Ala  
 -10 -5 1  
 Thr Ser Ile Ser Lys Pro Pro Pro Pro  
 5 10

<210> 4631

<211> 192

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -47..-1

<223> score 7.6

seq LXLGEGLTFLCLC/QV

<400> 4631

Met Pro Val Cys Phe Tyr Ser Leu Ile Cys Phe Phe Ile Tyr Phe Cys  
 -45 -40 -35  
 Leu Leu Ser Pro Arg Glu Thr Ile Glu Glu Val Ala Leu Phe Gln Phe

-30                      -25                      -20  
 Ser Leu Leu Xaa Leu Gly Glu Gly Leu Thr Phe Leu Cys Leu Cys Gln  
 -15                      -10                      -5                      1  
 Val Met Thr Asn Xaa Met Gln Leu Leu Phe Leu Ser Gly Val Val Cys  
                     5                      10                      15

<210> 4632  
 <211> 285  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -17..-1  
 <223> score 4.6  
       seq ILLWEACTGRCQA/SL

<400> 4632  
 Met Gln Cys Trp Ile Leu Leu Trp Glu Ala Cys Thr Gly Arg Cys Gln  
                     -15                      -10                      -5  
 Ala Ser Leu Leu Ser Pro Trp Pro Arg Gly Gly Arg Gly Lys Leu Val  
       1                      5                      10                      15  
 Ala Val Val Ala Ala Lys Trp Leu Ala Ala Ile Cys Gly Ile Trp Ala  
                     20                      25                      30  
 Ile Lys Glu Met Pro Ser His Gly His Ser Leu Gln Ala Gly Ala Gly  
                     35                      40                      45  
 Glu Gly Ala Leu Val Thr Trp Ser Leu Gln Thr Ser Phe Gly Val Lys  
                     50                      55                      60  
 Gln Tyr Lys Trp Gly Val Val Trp His Glu Ala Asn Leu Leu Leu  
       65                      70                      75

<210> 4633  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -38..-1  
 <223> score 4.4  
       seq LELLTSGDPLASA/SQ

<400> 4633  
 Met Leu His His Ala Trp Leu Ile Leu Tyr Leu Val Leu Val Glu Met  
                     -35                      -30                      -25  
 Gly Phe Leu His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Gly  
                     -20                      -15                      -10  
 Asp Pro Leu Ala Ser Ala Ser Gln Ser Ala Gly Asp Thr Gly Met Asn  
                     -5                      1                      5                      10  
 Pro Cys Ala Arg Pro Asn Phe Cys Ile Phe Ser Arg Asp  
                     15                      20

0044220"666E7550

<210> 4634  
 <211> 306  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SIGNAL  
 <222> -25...-1  
 <223> score 4.4  
 seq VVSWLVSAEGSHP/DP

<400> 4634  
 Met Thr Met Pro Ser Tyr His Ala Ser Met Ala Xaa Val Val Ser Trp  
 -25 -20 -15 -10  
 Leu Val Ser Ala Glu Gly Ser His Pro Asp Pro Ala Pro Phe Xaa Ala  
 -5 1 5  
 Asp Asn Pro Ser Glu Leu Pro Pro Pro Met Glu Arg Thr Gly Gly Ile  
 10 15 20  
 Gly Asp Ser Arg Pro Pro Ser Phe His Pro His Ala Gly Gly Gly Ser  
 25 30 35  
 Gln Glu Asn Leu Asp Asn Asp Thr Glu Thr Asp Ser Leu Val Ser Ala  
 40 45 50 55  
 Gln Arg Glu Arg Pro Arg Arg Arg Asp Gly Pro Glu His Ala Thr Arg  
 60 65 70  
 Leu Asn Gly Thr Ala Lys  
 75

<210> 4635  
 <211> 345  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SIGNAL  
 <222> -23...-1  
 <223> score 5.9  
 seq TLKFLTLQKSNA/KR

<400> 4635  
 Met Met Thr Ala Pro Val Leu Ala Ala Gln Thr Leu Lys Phe Leu Thr  
 -20 -15 -10  
 Leu Leu Gln Lys Ser Asn Ala Lys Arg Xaa Asn Leu Asp Arg Leu His  
 -5 1 5  
 Asp Glu Leu Trp Tyr Asn Asp Pro Gly Gln Met Asn Asp Gly Pro Leu  
 10 15 20 25  
 Cys Lys Cys Ser Ala Lys Ala Arg Arg Thr Gly Ile Arg His Ser Ile  
 30 35 40  
 Tyr Pro Gly Glu Glu Ala Ile Lys Pro Cys Arg Pro Met Thr Asn Asn  
 45 50 55  
 Ala Gly Arg Leu Phe His Tyr Arg Ile Thr Val Ser Pro Pro Thr Asn  
 60 65 70  
 Phe Leu Thr Asp Arg Pro Thr Val Ile Glu Tyr Asp Asp His Glu Tyr

75  
Ile Phe Glu  
90

80

85

<210> 4636  
<211> 180  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -28...-1  
<223> score 7.7  
seq LVMCFLSYFGTFA/VE

<400> 4636  
Met Ala Gln Ser Ile His Met Tyr Ala Ala Arg Val Gln Trp Gly Leu  
                  -25                  -20                  -15  
Val Met Cys Phe Leu Ser Tyr Phe Gly Thr Phe Ala Val Glu Phe Arg  
                  -10                  -5                  1  
His Tyr Arg Tyr Glu Ile Val Cys Ser Glu Tyr Gln Glu Asn Phe Leu  
5                  10                  15                  20  
Ser Phe Ser Glu Ser Leu Ser Glu Ala Ser Glu Tyr  
                  25                  30

<210> 4637  
<211> 405  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -20...-1  
<223> score 10.6  
seq LLTLLALLAHTSA/VA

<400> 4637  
Met Gln His Arg Gly Phe Leu Leu Leu Thr Leu Leu Ala Leu Leu Ala  
-20                  -15                  -10                  -5  
His Thr Ser Ala Val Ala Lys Lys Xaa Asp Lys Val Lys Lys Gly Gly  
                  1                  5                  10  
Pro Gly Leu Gly Leu Gly Gly Gly Asp Cys Arg Val Lys Ile Ala Thr  
15                  20                  25  
Lys Ala Asn Pro Trp Asp Gly Lys Ser Leu Lys Pro Asp Ser Val Arg  
30                  35                  40  
Ser Gln Leu Glu Thr Ser Leu Lys Arg Leu Gln Cys Pro Gln Val Asp  
45                  50                  55                  60  
Leu Phe Tyr Leu His Ala Pro Asp His Gly Thr Xaa Gly Gly Xaa Asp  
                  65                  70                  75  
Ala Ala Cys Leu Pro Ala Ala Ala Pro Gly Gly Lys Phe Val Xaa Leu  
80                  85                  90  
Gly Leu Ser Lys Xaa Ala Ser Trp Glu Val Ala Glu Ile Cys Thr Ser

004220" 656E560

95 100 105  
 Ala Arg Ala Met Ala Gly Ser  
 110 115

<210> 4638  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -40...-1  
 <223> score 3.9  
 seq CVNLLLGFEFVIS/RS

<400> 4638  
 Met Arg Tyr Phe Gln Gly Pro Ser Pro Tyr Ser Glu Ile Glu Ile Glu  
 -40 -35 -30 -25  
 Leu Cys Asp His Val Tyr Ser Phe Gln Gly Leu Cys Val Asn Leu Leu  
 -20 -15 -10  
 Leu Gly Phe Glu Pro Val Ile Ser Arg Ser Arg Xaa Ser Ser Leu Ala  
 -5 1 5  
 Val Glu Ser  
 10

<210> 4639  
 <211> 408  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -29...-1  
 <223> score 11.4  
 seq LCLLGCLLSHAAA/AP

<400> 4639  
 Met Glu Ala Leu Met Ala Arg Gly Ala Leu Thr Gly Pro Leu Arg Ala  
 -25 -20 -15  
 Leu Cys Leu Leu Gly Cys Leu Leu Ser His Ala Ala Ala Pro Ser  
 -10 -5 1  
 Pro Ile Ile Lys Phe Pro Gly Asp Val Ala Pro Lys Xaa Xaa Lys Xaa  
 5 10 15  
 Leu Ala Xaa Gln Tyr Leu Xaa Xaa Phe Tyr Gly Cys Pro Xaa Xaa Ser  
 20 25 30 35  
 Cys Asn Leu Phe Val Leu Lys Asp Thr Leu Lys Lys Met Gln Lys Phe  
 40 45 50  
 Phe Gly Leu Pro Gln Thr Gly Asp Leu Asp Gln Asn Thr Ile Xaa Xaa  
 55 60 65  
 Met Arg Lys Pro Arg Cys Gly Xaa Pro Asp Val Ala Xaa Tyr Asn Phe  
 70 75 80  
 Phe Pro Arg Lys Xaa Lys Trp Asp Lys Asn Gln Ile Thr Tyr Arg Ile



85 90 95  
 Ile Gly Tyr Thr Xaa Asp Leu Asp  
 100 105

<210> 4640  
 <211> 273  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -38...-1  
 <223> score 6.3  
 seq PCVSLLWAPRXFA/SS

<400> 4640  
 Met Asn His Leu Met Pro Leu Thr Val Leu His Ser Val Leu Glu Met  
 -35 -30 -25  
 Leu Arg Thr Pro Arg Thr Pro Pro Trp Pro Cys Val Ser Leu Leu Trp  
 -20 -15 -10  
 Ala Pro Arg Xaa Phe Ala Ser Ser Cys Ser Gln Ala Phe Thr Thr Leu  
 -5 1 5 10  
 Xaa Xaa Asn Cys Leu Leu Thr Asn Pro Ser Pro Thr Leu Asp Cys Asp  
 15 20 25  
 Leu Pro Glu Gly Ser Glu Ile Leu Asn Ser Ser Leu Tyr Pro His Cys  
 30 35 40  
 Leu Leu Ser Ala Trp Asn Thr Arg His Ser Thr  
 45 50

<210> 4641  
 <211> 177  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -25...-1  
 <223> score 4.3  
 seq ALYLSLNLYFANS/LY

<400> 4641  
 Met Tyr Cys Leu Xaa Cys Val Glu Lys Ile Ala Lys Ala Leu Tyr Leu  
 -25 -20 -15 -10  
 Ser Leu Asn Leu Tyr Phe Ala Asn Ser Leu Tyr Tyr Met Cys Val Cys  
 -5 1 5  
 Ser Tyr Ile Tyr Phe Tyr Leu Xaa Ile Tyr Xaa Tyr Xaa Leu Ile Lys  
 10 15 20  
 Xaa Xaa Ser Tyr Tyr Val Ala Gln Thr Gly Leu  
 25 30

<210> 4642  
 <211> 210

<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -38..-1  
<223> score 7.9  
seq LPFLSLFWPWAPG/AV

<400> 4642  
Met Gly Gly Phe Phe Pro Pro Thr Glu Val Arg Glu Val Cys Ala Asn  
-35 -30 -25  
Gln Gly Ala Ala His Asn Arg Asp Arg Leu Pro Phe Leu Ser Leu Phe  
-20 -15 -10  
Trp Pro Trp Ala Pro Gly Ala Val Ser Val Gly Gln Ala Arg Tyr Arg  
-5 1 5 10  
Thr Pro Thr Thr Xaa Ala Pro Ser Ala Ser Val Pro Trp Pro Arg Ala  
15 20 25  
Gly Thr Cys Arg Thr Pro  
30

<210> 4643  
<211> 207  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -20..-1  
<223> score 7.2  
seq LALWLGAVGVGVA/EP

<400> 4643  
Met Arg Arg Leu Leu Ile Pro Leu Ala Leu Trp Leu Gly Ala Val Gly  
-20 -15 -10 -5  
Val Gly Val Ala Glu Pro Pro Xaa Glu Ala Gln Arg Arg Gly Xaa Gln  
1 5 10  
Val Ala Leu Glu Glu Phe His Lys His Pro Pro Val Gln Trp Ala Phe  
15 20 25  
Gln Glu Thr Ser Val Glu Ser Ala Val Asp Thr Pro Xaa Pro Ala Gly  
30 35 40  
Ile Phe Val Arg Pro  
45

<210> 4644  
<211> 234  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -27..-1

<223> score 3.6  
seq RVLAGXSLRCEA/AG

<400> 4644

Met	Ala	Gly	Ser	Glu	Glu	Leu	Gly	Leu	Arg	Glu	Asp	Thr	Leu	Arg	Val
	-25						-20					-15			
Leu	Ala	Gly	Xaa	Ser	Leu	Arg	Arg	Cys	Glu	Ala	Ala	Gly	Ser	Pro	Val
	-10					-5					1			5	
Pro	Thr	Pro	Pro	Arg	Ser	Pro	Ala	Gln	Glu	Glu	Pro	Xaa	Asp	Phe	Leu
				10					15					20	
Ser	Arg	Leu	Arg	Arg	Cys	Leu	Pro	Cys	Ser	Xaa	Gly	Arg	Gly	Ala	Ala
			25					30					35		
Pro	Ser	Glu	Ser	Pro	Arg	Pro	Cys	Ser	Leu	Pro	Ile	Arg	Pro		
	40						45					50			

<210> 4645

<211> 231

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -41..-1

<223> score 9.5

seq LIIFLSFLPFINS/SF

<400> 4645

Met	Phe	Gln	Asn	Ile	Gln	Lys	Cys	Leu	Asn	Val	Pro	Phe	Val	Arg	Gly
	-40					-35					-30				
Tyr	His	Val	Phe	Tyr	Ile	Asn	Leu	Asn	Ala	Val	Ile	Leu	Ile	Ile	Phe
	-25				-20					-15				-10	
Leu	Ser	Phe	Leu	Pro	Phe	Ile	Asn	Ser	Ser	Phe	Val	Tyr	Lys	Thr	Asn
				-5					1				5		
Pro	Leu	Tyr	Asp	Ala	Ile	Ser	Asn	Tyr	Val	Phe	Ser	Phe	Arg	Tyr	Pro
		10					15					20			
Asn	Leu	Xaa	Xaa	Phe	Ala	Leu	Asp	Val	Arg	Leu	Val	Phe			
	25					30					35				

<210> 4646

<211> 222

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -22..-1

<223> score 10.3

seq FLLLLLLLLLTRW/AP

<400> 4646

Met Ile Arg Ala Ala Pro Pro Pro Leu Phe Leu Leu Leu Leu Leu

004220" 666E7360

```

      -20      -15      -10
Leu Leu Leu Thr Arg Trp Ala Pro His Arg Ala Met Ala Pro Ser Trp
  -5      1      5      10
Ser Ser Xaa Met Val Ser Pro Trp Ser Thr Thr Pro Ile Leu Gly Ile
      15      20      25
Xaa Leu Pro Met Cys Tyr Thr Trp Ser Pro Gln Leu Gly Trp Ala Ser
      30      35      40
Pro Thr Pro Met Thr Ser Phe Met Gln Leu
      45      50

```

<210> 4647  
 <211> 219  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -44...-1  
 <223> score 4.8  
 seq LTFCLVDLSNVDS/GM

```

<400> 4647
Met Tyr Ile Leu Leu Ile Trp Gly Gly Glu Phe Cys Arg Cys Leu Leu
      -40      -35      -30
Gly Leu Leu Gly Ala Glu Leu Ser Ser Ile Pro Trp Ile Ser Leu Leu
      -25      -20      -15
Thr Phe Cys Leu Val Asp Leu Ser Asn Val Asp Ser Gly Met Leu Lys
      -10      -5      1
Ser Pro Ile Ile Ile Val Trp Glu Ser Lys Ser Leu Cys Arg Ser Leu
  5      10      15      20
Arg Thr Cys Leu Met Asn Leu Gly Ala
      25

```

<210> 4648  
 <211> 195  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -46...-1  
 <223> score 3.5  
 seq RWLCLQAYLASFS/LE

```

<400> 4648
Met Ser Leu Thr Ala Ser Gly Pro Arg Ala Ala Trp Glu Glu Arg Val
      -45      -40      -35
Gly Gly Leu His Thr Trp Gly Ala Asn Ile Pro Thr Ala Pro Asp Ser
      -30      -25      -20      -15
Gln Arg Trp Leu Cys Leu Gln Ala Tyr Leu Ala Ser Phe Ser Leu Glu
      -10      -5      1
Ser Pro His Arg Ile Tyr Leu Glu Ser Pro Pro Thr Leu Leu Phe Pro

```

Pro 5 10 15

<210> 4649  
 <211> 156  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -41...-1  
 <223> score 9.9  
 seq ILPFLLPFPVNA/RS

<400> 4649  
 Met Ser Ser Trp Met Tyr Leu Gly Tyr Pro Ile Val Thr Ser Asn Thr  
 -40 -35 -30  
 Thr Cys Leu Lys Leu Ile Ser Ser Ser Phe Pro Gln Ile Leu Pro Phe  
 -25 -20 -15 -10  
 Leu Leu Phe Pro Phe Pro Val Asn Ala Arg Ser His Xaa Val Ala Gln  
 -5 1 5  
 Thr Lys Ser Pro  
 10

<210> 4650  
 <211> 192  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -41...-1  
 <223> score 5  
 seq RLLLIILSGCLVYG/TA

<400> 4650  
 Met Ala Gly Gly Met Lys Val Ala Val Ser Pro Ala Val Gly Pro Gly  
 -40 -35 -30  
 Pro Trp Gly Ser Gly Val Gly Gly Gly Thr Val Arg Leu Leu Leu  
 -25 -20 -15 -10  
 Ile Leu Ser Gly Cys Leu Val Tyr Gly Thr Ala Glu Thr Asp Val Asn  
 -5 1 5  
 Val Val Met Leu Gln Glu Ser Gln Val Cys Glu Lys Arg Ala Ser Leu  
 10 15 20

<210> 4651  
 <211> 177  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL

004220" 666E F560

<222> -14...-1  
 <223> score 5.4  
 seq FLSLSPLYSPCPC/DY

<400> 4651  
 Met Phe Leu Ser Leu Ser Pro Leu Tyr Ser Pro Cys Pro Cys Asp Tyr  
                   -10                  -5                  1  
 Ile Leu Met Pro Gly Asn Lys Pro Leu Ser His Val His Val Leu Ser  
           5                          10                  15  
 Pro Tyr Pro Lys Thr Val Ser Ser Cys Pro Cys Trp Arg Ile Tyr Val  
       20                          25                  30  
 Leu Lys Phe Leu Leu Cys Pro Tyr Arg Arg Gly  
 35                          40                  45

<210> 4652  
 <211> 324  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -20...-1  
 <223> score 6.8  
 seq GLLWMLFVSELRA/AT

<400> 4652  
 Met Arg Lys Thr Arg Leu Trp Gly Leu Leu Trp Met Leu Phe Val Ser  
 -20                          -15                  -10                  -5  
 Glu Leu Arg Ala Ala Thr Lys Leu Thr Glu Glu Lys Tyr Glu Leu Lys  
                           1                          5                  10  
 Glu Gly Gln Thr Leu Asp Val Lys Cys Asp Tyr Thr Leu Glu Lys Phe  
       15                          20                  25  
 Ala Ser Ser Gln Lys Ala Trp Gln Ile Ile Arg Asp Gly Glu Met Pro  
       30                          35                  40  
 Lys Thr Leu Ala Cys Thr Glu Arg Pro Ser Lys Asn Ser His Pro Val  
 45                          50                  55                  60  
 Gln Val Gly Arg Ile Ile Leu Glu Asp Tyr His Asp His Gly Leu Leu  
                           65                  70                  75  
 Arg Val Arg Met Val Asn Leu Gln Val Xaa Asp Ser  
           80                          85

<210> 4653  
 <211> 228  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -25...-1  
 <223> score 3.5  
 seq IFLGKSLFSLLEA/MI

004220"66667550

004220"656ET560

<400> 4653

```
Met Ser Phe Asn Leu Gln Ser Ser Lys Lys Leu Phe Ile Phe Leu Gly
-25          -20          -15          -10
Lys Ser Leu Phe Ser Leu Leu Glu Ala Met Ile Phe Ala Leu Leu Pro
          -5          1          5
Lys Pro Arg Lys Asn Val Ala Gly Glu Ile Val Leu Ile Thr Gly Ala
10          15          20
Gly Ser Gly Leu Gly Arg Leu Leu Ala Leu Gln Phe Ala Arg Leu Gly
25          30          35
Ser Val Leu Val Leu Trp Asp Ile Asn Lys Glu Gly
40          45          50
```

<210> 4654

<211> 390

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -21...-1

<223> score 5.1

seq PLLLLLPLLNVEP/SG

<400> 4654

```
Met Ser Pro Pro Pro Leu Leu Gln Pro Leu Leu Leu Leu Pro Leu
-20          -15          -10
Leu Asn Val Glu Pro Ser Gly Ala Thr Leu Ile Arg Ile Pro Leu His
-5          1          5          10
Arg Val Gln Pro Gly Arg Arg Ile Leu Asn Leu Leu Arg Gly Trp Xaa
15          20          25
Glu Pro Ala Glu Leu Pro Lys Leu Gly Ala Pro Ser Pro Gly Asp Lys
30          35          40
Pro Ile Phe Val Pro Leu Ser Asn Tyr Arg Asp Val Gln Tyr Phe Gly
45          50          55
Glu Ile Gly Leu Gly Thr Pro Pro Gln Asn Phe Thr Val Ala Phe Asp
60          65          70          75
Thr Gly Ser Ser Asn Leu Trp Val Pro Ser Arg Arg Cys His Phe Phe
80          85          90
Ser Val Pro Cys Trp Leu His Thr Asp Leu Ile Pro Lys Pro Leu Ala
95          100          105
Pro Ser
```

<210> 4655

<211> 339

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -18...-1

<223> score 10.4

seq LLQWLLLLLPTLC/GP

&lt;400&gt; 4655

Met Ala Glu Ser His Leu Leu Gln Trp Leu Leu Leu Leu Leu Pro Thr  
                   -15                  -10                  -5  
 Leu Cys Gly Pro Gly Thr Ala Ala Trp Xaa Thr Ser Ser Leu Ala Cys  
           1                  5                  10  
 Ala Gln Gly Pro Glu Phe Trp Cys Gln Ser Leu Glu Gln Ala Leu Xaa  
 15                  20                  25                  30  
 Cys Arg Ala Leu Gly His Cys Leu Gln Glu Val Trp Gly His Xaa Gly  
                   35                  40                  45  
 Ala Asp Asp Leu Cys Gln Glu Cys Glu Asp Ile Val His Ile Leu Asn  
                   50                  55                  60  
 Lys Met Ala Lys Glu Ala Ile Phe Gln Asp Thr Met Arg Lys Phe Leu  
           65                  70                  75  
 Glu Gln Glu Cys Asn Val Leu Pro Leu Lys Leu Leu Met Pro Gln Cys  
           80                  85                  90  
 Thr  
 95

&lt;210&gt; 4656

&lt;211&gt; 204

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SIGNAL

&lt;222&gt; -42...-1

&lt;223&gt; score 7.2

seq ILFSLSFLLVIIT/FP

&lt;400&gt; 4656

Met Asp Ser Arg Val Ser Ser Pro Glu Lys Gln Asp Lys Glu Asn Phe  
                   -40                  -35                  -30  
 Val Gly Val Asn Asn Lys Arg Leu Gly Val Cys Gly Trp Ile Leu Phe  
           -25                  -20                  -15  
 Ser Leu Ser Phe Leu Leu Val Ile Ile Thr Phe Pro Ile Ser Ile Trp  
           -10                  -5                  1                  5  
 Met Cys Leu Lys Ile Ile Lys Xaa Tyr Glu Arg Xaa Val Val Phe Arg  
           10                  15                  20  
 Leu Gly Arg His  
           25

&lt;210&gt; 4657

&lt;211&gt; 222

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SIGNAL

&lt;222&gt; -41...-1

&lt;223&gt; score 3.5

seq QLLGCLQCCWLQS/GR



<400> 4657

```
Met Phe Tyr Val Ala Met Thr Lys Thr His Lys Arg Ile Arg Ser Leu
  -40                      -35                      -30
Cys Asn Ile His His Gly Leu Phe Gln Phe Thr Gln Gln Leu Leu Gly
  -25                      -20                      -15                      -10
Cys Leu Gln Cys Cys Trp Leu Gln Ser Gly Arg Ala Pro Ala Thr Tyr
                      -5                      1                      5
Tyr Leu Val Glu Ser Ile Glu Lys Ser Ala His Gly Ser Val Leu Xaa
      10                      15                      20
Thr Tyr Asp Gln Thr Gln Thr Arg Ile Gly
      25                      30
```

<210> 4658

<211> 219

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -30..-1

<223> score 5.8

seq KLLFVLFLRQCLT/LL

<400> 4658

```
Met Xaa Asp Xaa Val Xaa Ser Ser Ile Gln Ala Leu Arg Leu Asn Ile
  -30                      -25                      -20                      -15
Lys Lys Leu Leu Phe Val Leu Phe Leu Arg Gln Cys Leu Thr Leu Leu
                      -10                      -5                      1
Pro Arg Leu Glu Cys Ser Gly Thr Val Ser Ala His Cys Asn Leu Cys
      5                      10                      15
Leu Leu Gly Ser Ser Asn Ser Pro Ala Ser Ala Ser Gln Val Ala Gly
      20                      25                      30
Leu Leu Ser Cys Ala Thr Leu Pro Gly
      35                      40
```

<210> 4659

<211> 237

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -16..-1

<223> score 14.8

seq SLPLLLLLLGAWA/IP

<400> 4659

```
Met Arg Leu Ser Leu Pro Leu Leu Leu Leu Leu Gly Ala Trp Ala
  -15                      -10                      -5
Ile Pro Gly Gly Leu Gly Asp Arg Ala Pro Leu Thr Ala Thr Ala Pro
```

1                      5                      10                      15  
 Gln Leu Asp Asp Glu Glu Met Tyr Ser Ala His Met Pro Ala His Leu  
                     20                      25                      30  
 Arg Cys Asp Ala Cys Arg Ala Val Ala Tyr Gln Val Ser Pro Ser Pro  
                     35                      40                      45  
 Leu Ser Pro Ala Leu Leu Thr Pro Leu Leu Lys Pro Ala Pro Thr  
                     50                      55                      60

<210> 4660  
 <211> 162  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -49...-1  
 <223> score 8.5  
       seq IVFLLLRVSPCLG/PS

<400> 4660  
 Met His Ile Phe Ser Ile Cys Cys Met Xaa Ser Glu Leu His Lys Met  
                     -45                      -40                      -35  
 Lys Ser Leu Ser Leu Gln Leu Ala Ser Glu Lys Arg Ser Leu Val Ala  
                     -30                      -25                      -20  
 Leu Val Glu Glu Ile Val Phe Leu Leu Leu Arg Val Ser Pro Cys Leu  
                     -15                      -10                      -5  
 Gly Pro Ser Xaa Lys Pro  
       1                      5

<210> 4661  
 <211> 156  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -23...-1  
 <223> score 3.7  
       seq TNLLCLTFQRCQS/YN

<400> 4661  
 Met Leu Ser Gln Ser Phe Gln Lys Asn Lys Thr Asn Leu Leu Cys Leu  
                     -20                      -15                      -10  
 Thr Phe Gln Arg Cys Gln Ser Tyr Asn Trp Leu Asn Ile Phe Glu Ala  
                     -5                      1                      5  
 Thr Tyr Met Thr Thr Leu Phe Ile Ser Val Ile Xaa Thr Asn Phe Leu  
       10                      15                      20                      25  
 Lys Arg Tyr Leu

<210> 4662  
 <211> 207  
 <212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -15...-1

<223> score 3.6

seq VVEASSSVRLASS/EV

<400> 4662

Met Leu Val Val Glu Ala Ser Ser Ser Val Arg Leu Ala Ser Ser Glu  
-15 -10 -5 1  
Val Thr Ser Trp Ser Ile Leu Val Thr Pro Ser Ala Ser Thr Pro Ile  
5 10 15  
Ile Ser Leu Ser Ala Gly Pro Leu Arg Thr Pro Ser His Ser Lys Thr  
20 25 30  
Trp Leu Leu Leu Gly Ala Leu Glu Pro Ala Ser Glu Arg Pro Cys Ser  
35 40 45  
Ser Val Leu Arg Ser  
50

<210> 4663

<211> 165

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -35...-1

<223> score 5.4

seq LVVVCYLSWRVSS/RS

<400> 4663

Met Pro Leu Lys Asn Leu Phe Ser Val Gly Leu Trp Asp Pro Tyr Asn  
-35 -30 -25 -20  
Leu Leu Lys Lys His Val Leu Val Val Val Cys Tyr Leu Ser Trp Arg  
-15 -10 -5  
Val Ser Ser Arg Ser Trp Thr Leu Leu Ile Thr Pro Val Thr Leu His  
1 5 10  
Ala Ser Leu Ser Thr Gln Ala  
15 20

<210> 4664

<211> 219

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -24...-1

<223> score 5.3

seq LFHLLFLPHYIET/FK

<400> 4664

Met Cys Ser His Ala Ser Met Ser Phe His Thr Leu Phe His Leu Leu  
                   -20                  -15                  -10  
 Phe Leu Pro His Tyr Ile Glu Thr Phe Lys Pro Gln Ser Lys His Cys  
                   -5                  1                  5  
 Phe Phe Trp Ile Ala Ala Phe Leu Thr Ser Leu Leu Thr Pro Gln Ser  
       10                  15                  20  
 Leu Gln Gly Phe His Ser Ser Leu Cys Ala Leu Arg Ser Gln His Phe  
   25                  30                  35                  40  
 Pro Ser Thr Cys Asn Cys Phe Cys Tyr  
                   45

<210> 4665

<211> 168

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -17...-1

<223> score 3.8  
       seq TVLSGCASRGTTG/LP

<400> 4665

Met Glu Ser Phe Thr Val Leu Ser Gly Cys Ala Ser Arg Gly Thr Thr  
                   -15                  -10                  -5  
 Gly Leu Pro Gln Glu Val His Val Leu Asn Leu Arg Thr Ala Gly Gln  
       1                  5                  10                  15  
 Gly Pro Gly Gln Leu Gln Arg Glu Val Thr Leu His Leu Asn Pro Ile  
                   20                  25                  30  
 Ser Ser Val His Ile His His Asn  
                   35

<210> 4666

<211> 177

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -26...-1

<223> score 8.7  
       seq LLLLDVPTAAVQA/SP

<400> 4666

Met Thr Leu Ser Pro Leu Leu Leu Phe Leu Pro Pro Leu Leu Leu Leu  
                   -25                  -20                  -15  
 Leu Asp Val Pro Thr Ala Ala Val Gln Ala Ser Pro Leu Gln Ala Leu  
   -10                  -5                  1                  5  
 Asp Phe Phe Gly Asn Gly Pro Pro Val Asn Tyr Lys Thr Gly Asn Leu  
                   10                  15                  20

Tyr Leu Arg Gly Pro Leu Lys Lys Ser Asn Ala  
 25 30

<210> 4667  
 <211> 270  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -17...-1  
 <223> score 5.5  
 seq LHLPALSSSCLWT/FP

<400> 4667  
 Met Gly Gly Phe Leu His Leu Pro Ala Leu Ser Ser Ser Cys Leu Trp  
 -15 -10 -5  
 Thr Phe Pro Pro Met Cys Val Arg Ile Phe Ser Tyr Val Pro Leu Pro  
 1 5 10 15  
 Ile Leu Thr Pro Lys Thr Ile Asn Leu Ile Pro Val Leu Ala Ile Cys  
 20 25 30  
 Ser Cys Leu Pro Gly Pro Gly Pro Ala Leu Pro Leu Pro Ala Phe Pro  
 35 40 45  
 Thr Leu Leu Val Ser Trp Tyr His Cys Pro Pro Gln Lys Lys Thr Gly  
 50 55 60  
 Met Met Asp Thr Asp Asp Phe Arg Ala Cys  
 65 70

<210> 4668  
 <211> 213  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -41...-1  
 <223> score 3.9  
 seq CRCLITLPRSCR/ST

<400> 4668  
 Met Leu Gly Pro Pro Leu Gln Pro Gly Ser His Gly Lys Val Leu Ala  
 -40 -35 -30  
 Pro Gln Gly Ser Ser Gly Leu Thr Pro Pro Phe Pro Cys Arg Cys Leu  
 -25 -20 -15 -10  
 Ile Thr Leu Pro Arg Ser Cys Arg Pro Ser Thr Ser Val Pro Arg Xaa  
 -5 1 5  
 Ala Ser Thr Arg Ser Ser Gln Arg Pro Xaa Ser Ser Cys Trp Arg Ser  
 10 15 20  
 Ser Cys Ser Thr Thr Ala Thr  
 25 30

<210> 4669

<211> 216  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -28...-1  
 <223> score 8  
 seq IVFCFVFLRQSLA/LS

<400> 4669  
 Met Ile Arg Phe Ser Leu Ile Trp Lys Leu Met Ile Asp Phe Ile Ile  
                   -25                  -20                  -15  
 Val Phe Cys Phe Val Phe Leu Arg Gln Ser Leu Ala Leu Ser Pro Arg  
                   -10                  -5                  1  
 Leu Glu Cys Ser Gly Ala Ile Ser Xaa His Ser Asn Leu Xaa Xaa Pro  
 5                  10                  15                  20  
 Ala Phe Lys Gln Phe Ser Cys Leu Ser Leu Leu Ser Ser Trp Asp Cys  
                   25                  30                  35  
 Arg Cys Pro Thr Met Pro Asp Cys  
                   40

<210> 4670  
 <211> 192  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -15...-1  
 <223> score 6.7  
 seq LFVLFLFLFFSFL/FF

<400> 4670  
 Met Arg Leu Phe Val Leu Phe Leu Phe Leu Phe Ser Phe Leu Phe  
 -15                  -10                  -5                  1  
 Phe Xaa Xaa Gly Ser Leu Ala Leu Leu Pro Arg Leu Glu Cys Ser Gly  
                   5                  10                  15  
 Met Ile Leu Ala His Cys Lys Leu His Leu Pro Gly Ser Arg His Ser  
                   20                  25                  30  
 Pro Ala Ser Ala Ser Arg Val Ala Ala Thr Ile Gly Thr Arg His His  
                   35                  40                  45

<210> 4671  
 <211> 171  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -20...-1  
 <223> score 4.4

004220"666E7560

seq LHLLGSSDSXCXS/LP

<400> 4671

Met Ile Ser Ala His His Asn Leu His Leu Leu Gly Ser Ser Asp Ser  
-20 -15 -10 -5  
Xaa Cys Xaa Ser Leu Pro Ser Ser Trp Asp Tyr Ser His Ala Pro Ser  
1 5 10  
Arg Pro Ala Asn Phe Val Phe Leu Val Glu Thr Gly Phe Leu Tyr Val  
15 20 25  
Gly Gln Ala Gly Leu Glu Leu Pro Thr  
30 35

<210> 4672

<211> 183

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -27...-1

<223> score 5.9

seq ITLFICFFETGSC/SV

<400> 4672

Met Met Ala Trp Leu Val Leu Lys Gln Lys Asn Arg Trp Leu Ile Thr  
-25 -20 -15  
Leu Phe Ile Cys Phe Phe Glu Thr Gly Ser Cys Ser Val Ala Gln Ala  
-10 -5 1 5  
Gly Val Gln Trp His Asp His Ser Ser Leu Arg Leu Pro Pro Trp Gly  
10 15 20  
Ser Ser Tyr Pro Pro Thr Leu Ala Ser Gln Gln Val Arg  
25 30

<210> 4673

<211> 156

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -19...-1

<223> score 7

seq STVVLQVLTQATS/QD

<400> 4673

Met Asp Leu Asn Ser Ala Ser Thr Val Val Leu Gln Val Leu Thr Gln  
-15 -10 -5  
Ala Thr Ser Gln Asp Thr Ala Val Leu Lys Pro Ala Glu Glu Gln Leu  
1 5 10  
Lys Gln Trp Glu Thr Gln Pro Gly Phe Tyr Ser Val Leu Leu Asn Ile  
15 20 25

Phe Thr Asn His  
30

<210> 4674  
<211> 192  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -19...-1  
<223> score 7.9  
seq LLLALLLPGGDNA/DA

<400> 4674  
Met Leu Phe Leu Gln Phe Leu Leu Leu Ala Leu Leu Leu Pro Gly Gly  
                  -15                  -10                  -5  
Asp Asn Ala Asp Ala Ser Gln Glu His Val Ser Phe His Val Ile Gln  
                  1                  5                  10  
Ile Phe Ser Phe Val Asn Gln Ser Trp Ala Arg Gly Gln Gly Ser Gly  
          15                  20                  25  
Trp Leu Glu Xaa Leu Gln Thr His Gly Trp Asp Ser Glu Ser Asp Thr  
30                  35                  40                  45

<210> 4675  
<211> 183  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -16...-1  
<223> score 3.5  
seq LQALLVVALHSHP/AE

<400> 4675  
Met Pro Gly Leu Gln Ala Leu Leu Val Val Ala Leu His Ser His Pro  
          -15                  -10                  -5  
Ala Glu Glu Asp Leu Leu Asp Trp Ile Phe Ser Gly Arg Ser Leu Thr  
1                  5                  10                  15  
Leu Ser Pro Arg Leu Glu Cys Ser Gly Thr Ile Ser Ala His Cys Lys  
          20                  25                  30  
Leu Arg Leu Pro Asp Ile Val Leu Tyr Leu Pro Met Arg  
          35                  40                  45

<210> 4676  
<211> 273  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL



<222> -49...-1  
 <223> score 6.4  
 seq AVSFAPLIQPCHS/ES

<400> 4676  
 Met Lys Asn Leu Leu Lys Val Gly Gly Ile Leu Val Met Pro Leu Glu  
                   -45                  -40                  -35  
 Glu Lys Leu Thr Lys Ile Thr Arg Thr Gly Pro Ser Ala Trp Glu Thr  
                   -30                  -25                  -20  
 Xaa Lys Ile Leu Ala Val Ser Phe Ala Pro Leu Ile Gln Pro Cys His  
                   -15                  -10                  -5  
 Ser Glu Ser Gly Lys Ser Arg Leu Val Gln Leu Pro Pro Val Ala Val  
   1                                  5                                  10                                  15  
 Arg Ser Leu Gln Asp Leu Ala Arg Ile Ala Ile Arg Gly Thr Ile Lys  
                                   20                                  25                                  30  
 Lys Ile Ile His Gln Glu Thr Val Ser Lys Asn  
                                   35                                  40

<210> 4677  
 <211> 168  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -36...-1  
 <223> score 4.6  
 seq TLLWCFSALLPT/IV

<400> 4677  
 Met Asp Lys Phe Asn Val Thr Lys Pro Val Glu Tyr Leu Asn Asn Pro  
           -35                  -30                  -25  
 Ile Ile Thr Gln Phe Phe Pro Thr Leu Leu Leu Trp Cys Phe Ser Ala  
   -20                  -15                  -10                  -5  
 Leu Leu Pro Thr Ile Val Tyr Tyr Ser Ala Phe Phe Glu Ala His Trp  
                                   1                                  5                                  10  
 Thr Arg Ser Gly Glu Asn Arg Thr  
           15                                  20

<210> 4678  
 <211> 222  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -43...-1  
 <223> score 3.5  
 seq QHWLLGGFPRTLQ/QA

<400> 4678

Met Ala Lys Gln Tyr Ile Glu Lys Ser Leu Leu Val Pro Asp His Val  
                   -40                  -35                  -30  
 Ile Thr Arg Leu Met Met Ser Glu Leu Glu Asn Arg Arg Gly Gln His  
                   -25                  -20                  -15  
 Trp Leu Leu Gly Gly Phe Pro Arg Thr Leu Gly Gln Ala Glu Ala Leu  
                   -10                  -5                  1                  5  
 Asp Lys Ile Cys Glu Val Asp Leu Val Ile Ser Leu Asn Ile Pro Phe  
                   10                  15                  20  
 Glu Thr Leu Lys Asp Arg Leu Ser Arg Gln  
                   25                  30

<210> 4679  
 <211> 198  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -45...-1  
 <223> score 3.6  
       seq ALLELIDSPECLS/KC

<400> 4679  
 Met Ala Leu His Phe Gln Ser Leu Ala Glu Leu Glu Xaa Leu Cys Thr  
                   -45                  -40                  -35                  -30  
 His Leu Tyr Ile Gly Thr Asp Leu Thr Gln Arg Ile Glu Ala Glu Lys  
                   -25                  -20                  -15  
 Ala Leu Leu Glu Leu Ile Asp Ser Pro Glu Cys Leu Ser Lys Cys Gln  
                   -10                  -5                  1  
 Leu Leu Leu Glu Gln Gly Thr Thr Ser Tyr Ala Gln Leu Leu Ala Ala  
                   5                  10                  15  
 Thr Xaa  
 20

<210> 4680  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -29...-1  
 <223> score 7.6  
       seq PTLAIALAANAWA/FV

<400> 4680  
 Met Tyr Thr Tyr Gly Asn Lys Gln His Asn Ser Pro Thr Trp Asp Asp  
                   -25                  -20                  -15  
 Pro Thr Leu Ala Ile Ala Leu Ala Ala Asn Ala Trp Ala Phe Val Leu  
                   -10                  -5                  1  
 Phe Tyr Val Ile Pro Glu Val Ser Gln Val Thr Lys Ser Ser Pro Glu  
                   5                  10                  15

004220"666E"550

Gln Ser Tyr Gln Gly Asp Met Tyr Pro Thr Arg Asp  
20 25 30

<210> 4681  
<211> 168  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -43...-1  
<223> score 6.1  
seq SAATLASLGGTSS/RR

<400> 4681  
Met Lys Glu Leu Glu Arg Gln Gln Lys Glu Val Glu Glu Arg Pro Glu  
-40 -35 -30  
Lys Asp Phe Thr Glu Lys Gly Ser Arg Asn Met Pro Gly Leu Ser Ala  
-25 -20 -15  
Ala Thr Leu Ala Ser Leu Gly Gly Thr Ser Ser Arg Arg Gly Ser Gly  
-10 -5 1 5  
Asp Thr Ser Ile Ser Ile Asp Pro  
10

<210> 4682  
<211> 219  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -36...-1  
<223> score 5.3  
seq ALYIMCVPHSVWG/CA

<400> 4682  
Met Phe Arg Ser Asp Arg Met Trp Xaa Cys His Trp Lys Trp Lys Pro  
-35 -30 -25  
Ser Pro Leu Leu Phe Leu Phe Ala Leu Tyr Ile Met Cys Val Pro His  
-20 -15 -10 -5  
Ser Val Trp Gly Cys Ala Asn Cys Arg Val Val Leu Ser Asn Pro Ser  
1 5 10  
Gly Thr Phe Thr Ser Pro Cys Tyr Pro Asn Asp Tyr Pro Asn Ser Gln  
15 20 25  
Ala Cys Met Trp Thr Leu Arg Asp Pro  
30 35

<210> 4683  
<211> 378  
<212> PRT  
<213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -30...-1  
 <223> score 10.6  
 seq GLLCCAALSLLWA/GP

<400> 4683  
 Met His Arg Tyr Arg Arg Pro Leu Arg His Ala Ala Ser Ala Met Ser  
 -30 -25 -20 -15  
 Ile Gly Leu Leu Cys Cys Ala Ala Leu Ser Leu Leu Trp Ala Gly Pro  
 -10 -5 1  
 Val Asn Ala Gly Val Thr Gln Thr Pro Lys Phe Gln Val Leu Lys Thr  
 5 10 15  
 Gly Gln Ser Met Thr Leu Gln Cys Ala Gln Asp Met Asn His Glu Tyr  
 20 25 30  
 Met Ser Trp Tyr Arg Gln Asp Pro Gly Met Gly Leu Arg Leu Ile His  
 35 40 45 50  
 Tyr Ser Val Gly Ala Gly Ile Thr Asp Gln Gly Glu Val Pro Asn Gly  
 55 60 65  
 Tyr Asn Val Ser Arg Ser Thr Thr Glu Asp Phe Pro Leu Arg Leu Leu  
 70 75 80  
 Ser Ala Ala Pro Ser Gln Thr Ser Val Tyr Phe Cys Ala Ser  
 85 90 95

<210> 4684  
 <211> 390  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -48...-1  
 <223> score 5.7  
 seq LLLFFGKLLVVG/VG

<400> 4684  
 Met Ile Ala Ile Tyr Gly Lys Asn Phe Cys Val Ser Ala Lys Asn Ala  
 -45 -40 -35  
 Phe Met Leu Leu Met Arg Asn Ile Val Arg Val Val Leu Asp Lys  
 -30 -25 -20  
 Val Thr Asp Leu Leu Leu Phe Phe Gly Lys Leu Leu Val Val Gly Gly  
 -15 -10 -5  
 Val Gly Val Leu Ser Phe Phe Phe Ser Gly Arg Ile Pro Gly Leu  
 1 5 10 15  
 Gly Lys Asp Phe Lys Ser Pro His Leu Asn Tyr Tyr Trp Leu Pro Xaa  
 20 25 30  
 Met Thr Ser Ile Leu Gly Ala Tyr Val Ile Ala Ser Gly Phe Phe Ser  
 35 40 45  
 Val Phe Gly Met Cys Val Asp Thr Leu Phe Leu Cys Phe Leu Glu Asp  
 50 55 60  
 Leu Glu Arg Thr Thr Ala Pro Trp Thr Ala Leu Leu His Val Gln Glu  
 65 70 75 80

004220"666E360

Leu Leu

<210> 4685  
<211> 228  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -23...-1  
<223> score 6.2  
seq PLPLLLLLQPGLP/LF

<400> 4685  
Met Asp Leu Val Cys Xaa Pro Leu Ser Val Pro Leu Pro Leu Leu Leu  
                  -20                  -15                  -10  
Leu Leu Gln Pro Gly Leu Pro Leu Phe Ser Ala Leu His Pro Arg Leu  
                  -5                  1                  5  
Cys Thr Glu Xaa His Xaa Xaa Xaa Arg Val Val Tyr Cys Leu Phe Cys  
10                  15                  20                  25  
Phe Leu Gly Phe Gln Cys Pro Ser Gly Met Gln Val Gly Ser Gln Pro  
                  30                  35                  40  
Val Cys Ser Leu Ser Ala Pro Pro Arg Pro Ala Pro  
                  45                  50

<210> 4686  
<211> 237  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -19...-1  
<223> score 9.9  
seq ILFLVFLLAGLRS/KA

<400> 4686  
Met Lys Ser Phe Ser Arg Ile Leu Phe Leu Val Phe Leu Leu Ala Gly  
                  -15                  -10                  -5  
Leu Arg Ser Lys Ala Ala Pro Ser Ala Pro Leu Pro Leu Gly Cys Gly  
                  1                  5                  10  
Phe Pro Asp Met Ala His Pro Ser Glu Thr Ser Pro Leu Lys Gly Ala  
15                  20                  25  
Ser Glu Asn Ser Lys Arg Asp Arg Leu Asn Pro Glu Phe Pro Gly Thr  
30                  35                  40                  45  
Pro Tyr Pro Glu Pro Ser Lys Leu Pro His Thr Val Ser Leu Glu  
                  50                  55                  60

<210> 4687  
<211> 264  
<212> PRT  
<213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -15...-1  
 <223> score 7.5  
 seq AVLLALLMAGLAL/QP

<400> 4687  
 Met Lys Ala Val Leu Leu Ala Leu Leu Met Ala Gly Leu Ala Leu Gln  
 -15 -10 -5 1  
 Pro Gly Thr Ala Leu Leu Cys Tyr Ser Trp Xaa Ala Gln Val Xaa Asn  
 5 10 15  
 Glu Asp Cys Leu Gln Val Glu Asn Cys Thr Gln Leu Gly Glu Gln Cys  
 20 25 30  
 Trp Thr Ala Arg Ile Arg Ala Val Gly Leu Leu Thr Val Ile Ser Lys  
 35 40 45  
 Gly Cys Ser Leu Asn Cys Val Asp Xaa Ser Gln Asp Tyr Tyr Val Gly  
 50 55 60 65  
 Lys Lys Asn Ile Thr Cys Cys Asp  
 70

<210> 4688  
 <211> 384  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -28...-1  
 <223> score 9.5  
 seq LVXFSLLATAILG/AV

<400> 4688  
 Met Ala Ser Lys Gly Met Arg His Phe Cys Leu Ile Ser Glu Gln Leu  
 -25 -20 -15  
 Val Xaa Phe Ser Leu Leu Ala Thr Ala Ile Leu Gly Ala Val Ser Trp  
 -10 -5 1  
 Gln Pro Thr Asn Gly Ile Phe Leu Ser Met Phe Leu Ile Val Leu Pro  
 5 10 15 20  
 Leu Glu Ser Met Ala His Gly Leu Phe His Glu Leu Gly Asn Cys Leu  
 25 30 35  
 Gly Gly Thr Ser Val Gly Tyr Ala Ile Val Ile Pro Thr Asn Phe Cys  
 40 45 50  
 Ser Pro Asp Gly Gln Pro Thr Leu Leu Pro Pro Glu His Val Gln Glu  
 55 60 65  
 Leu Asn Leu Arg Ser Thr Gly Met Leu Asn Ala Ile Gln Arg Phe Phe  
 70 75 80  
 Ala Tyr His Met Ile Glu Thr Tyr Gly Cys Asp Tyr Ser Thr Ser Gly  
 85 90 95 100

<210> 4689  
 <211> 177

<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -44...-1  
<223> score 3.7  
seq LAERLGLFEELWA/AQ

<400> 4689  
Met Ala Leu Tyr Gln Arg Trp Arg Cys Leu Arg Leu Gln Gly Leu Gln  
                  -40                  -35                  -30  
Ala Cys Arg Leu His Thr Ala Val Val Ser Thr Pro Pro Arg Trp Leu  
                  -25                  -20                  -15  
Ala Glu Arg Leu Gly Leu Phe Glu Glu Leu Trp Ala Ala Gln Val Lys  
                  -10                  -5                  1  
Arg Leu Ala Ser Met Ala Gln Lys Glu Pro Gln  
5                  10                  15

<210> 4690  
<211> 198  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -29...-1  
<223> score 13  
seq LLLVLLLVTXRS/MP

<400> 4690  
Met Trp Leu Trp Glu Asp Gln Gly Gly Leu Leu Gly Pro Phe Ser Phe  
                  -25                  -20                  -15  
Leu Leu Leu Val Leu Leu Leu Val Thr Arg Xaa Arg Ser Met Pro Ala  
                  -10                  -5                  1  
Ser Ser Pro Ala Ala Ser Ser Phe Tyr Cys Ala Ser Ser Ala Xaa Ser  
5                  10                  15  
Arg Cys Pro Leu Ala Gly Pro Cys Arg Cys Ser Ser Pro Gly Thr Ala  
20                  25                  30                  35  
Phe Leu

<210> 4691  
<211> 264  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -48...-1  
<223> score 5.4  
seq ILLEVFVWNGLQG/LP

004220" 6664560

<400> 4691

Met	Xaa	Pro	Asn	Asn	Phe	Trp	Gln	Lys	Leu	Gly	Arg	Lys	Lys	Pro	Arg
			-45					-40					-35		
Ile	Phe	Thr	Cys	Thr	Gln	Ser	Ser	Thr	Gly	Glu	Ala	Ala	Val	Lys	Ala
		-30				-25					-20				
Glu	Asn	Leu	Ile	Leu	Leu	Glu	Val	Phe	Val	Trp	Asn	Gly	Leu	Gln	Gly
	-15				-10					-5					
Leu	Pro	Ser	Glu	Leu	Ser	Asp	Thr	Ser	Gly	Ser	Ser	Lys	Lys	Leu	Gly
1			5						10					15	
Ser	Leu	Val	Gly	Trp	Trp	Arg	Thr	Leu	Lys	Met	Ala	Pro	Ala	Cys	Leu
		20						25					30		
Trp	Ser	Met	Trp	Glu	Ser	Pro	Pro								
		35					40								

<210> 4692

<211> 210

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -38..-1

<223> score 3.6

seq LSWLITWFGHXL/DF

<400> 4692

Met	Pro	Ile	Ile	Asp	Gln	Val	Asn	Pro	Glu	Leu	His	Asp	Phe	Met	Gln
		-35					-30					-25			
Ser	Ala	Glu	Val	Gly	Thr	Ile	Phe	Ala	Leu	Ser	Trp	Leu	Ile	Thr	Trp
	-20					-15					-10				
Phe	Gly	His	Xaa	Leu	Ser	Asp	Phe	Arg	His	Val	Val	Arg	Leu	Tyr	Asp
	-5				1				5					10	
Phe	Phe	Leu	Ala	Cys	His	Pro	Leu	Met	Pro	Ile	Tyr	Phe	Ala	Ala	Val
			15					20					25		
Ile	Val	Leu	Tyr	Arg	Glu										
		30													

<210> 4693

<211> 306

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -20..-1

<223> score 3.9

seq FLAPSSGVQPTLA/MP

<400> 4693

Met	Val	Arg	Glu	Arg	Glu	Ser	Phe	Leu	Ala	Pro	Ser	Ser	Gly	Val	Gln
-20					-15					-10				-5	



Pro Thr Leu Ala Met Pro Asn Ile Ala Val Gly Gln Asn Val Thr Val  
                   1                  5                  10  
 Thr Glu Arg Val Leu Ala Pro Ala Ser Thr Leu Gln Ser Ser Tyr Gln  
           15                  20                  25  
 Ile Pro Thr Glu Asn Ser Met Thr Ala Arg Asn Thr Thr Val Ser Gly  
       30                  35                  40  
 Ala Gly Val Pro Gly Pro Leu Pro Asp Phe Gly Leu Glu Glu Ser Gly  
 45                  50                  55                  60  
 His Ser Asn Ser Thr Ile Thr Thr Ser Ser Thr Arg Val Thr Lys His  
                   65                  70                  75  
 Ser Thr Val Gln His Ser  
                   80

<210> 4694  
 <211> 186  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -45...-1  
 <223> score 3.9  
       seq SLLTESSASRVHA/IX

<400> 4694  
 Met Cys Phe Arg Leu Arg Leu Phe Ile Ala Pro Pro Pro Phe Phe Phe  
 -45                  -40                  -35                  -30  
 Glu Thr Glu Ser Arg Ser Asp Ala Gln Ala Gly Xaa Gln Trp Xaa Arg  
                   -25                  -20                  -15  
 Ser Leu Leu Thr Glu Ser Ser Ala Ser Arg Val His Ala Ile Xaa Leu  
                   -10                  -5                  1  
 Pro Gln Pro Pro Glu Xaa Leu Gly Leu Gln Ala Pro Thr Xaa  
       5                  10                  15

<210> 4695  
 <211> 156  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -18...-1  
 <223> score 7.2  
       seq LFFLLRIALASWA/LF

<400> 4695  
 Met Met Thr Leu Ala Leu Phe Phe Leu Leu Arg Ile Ala Leu Ala Ser  
                   -15                  -10                  -5  
 Trp Ala Leu Phe Trp Ile His Met Asn Phe Arg Arg Ala Phe Phe His  
       1                  5                  10  
 Leu Arg Trp Phe Asp Ile Asn Ser Thr Glu Ser Val Asn Cys Phe Gly  
 15                  20                  25                  30

004220"666E"560

Gln Tyr Gly Leu

<210> 4696

<211> 255

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -45...-1

<223> score 6.7

seq PMLGLAAFRWIWS/RE

<400> 4696

Met Asn Asn Leu Asn Asp Pro Pro Asn Trp Asn Ile Arg Pro Asn Ser  
-45 -40 -35 -30  
Arg Ala Asp Gly Gly Asp Gly Ser Arg Trp Asn Tyr Ala Leu Leu Val  
-25 -20 -15  
Pro Met Leu Gly Leu Ala Ala Phe Arg Trp Ile Trp Ser Arg Glu Ser  
-10 -5 1  
Gln Lys Glu Val Glu Lys Glu Arg Glu Ala Tyr Arg Arg Arg Thr Ala  
5 10 15  
Ala Phe Gln Gln Asp Leu Glu Ala Lys Tyr His Ala Met Ile Ser Xaa  
20 25 30 35  
Asn Arg Arg Ala Val  
40

<210> 4697

<211> 255

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -20...-1

<223> score 9.6

seq LLALLLCGRPGRG/QT

<400> 4697

Met Lys Ala Leu Gly Ala Val Leu Leu Ala Leu Leu Leu Cys Gly Arg  
-20 -15 -10 -5  
Pro Gly Arg Gly Gln Thr Gln Gln Glu Glu Glu Glu Asp Glu Asp  
1 5 10  
His Gly Pro Asp Asp Tyr Asp Glu Glu Asp Glu Asp Glu Val Glu Glu  
15 20 25  
Glu Glu Thr Asn Arg Leu Pro Gly Gly Arg Ser Arg Val Leu Leu Arg  
30 35 40  
Cys Tyr Thr Xaa Xaa Ser Leu Pro Arg Asp Glu Arg Cys Asn Leu Thr  
45 50 55 60  
Gln Asn Cys Ser His  
65

<210> 4698  
 <211> 240  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 7.2  
 seq VSIMLLLVTVSDC/AV

<400> 4698  
 Met Arg Gly Ala Thr Arg Val Ser Ile Met Leu Leu Leu Val Thr Val  
                   -15                  -10                  -5  
 Ser Asp Cys Ala Val Ile Thr Gly Ala Cys Glu Arg Asp Val Gln Cys  
                   1                  5                  10  
 Gly Ala Gly Thr Cys Cys Ala Ile Ser Leu Trp Leu Arg Gly Leu Arg  
           15                  20                  25  
 Met Cys Thr Pro Leu Gly Arg Glu Gly Glu Glu Cys His Pro Gly Ser  
 30                  35                  40                  45  
 His Lys Ile Pro Phe Phe Arg Lys Arg Lys His His Thr Cys Pro Cys  
                   50                  55                  60

<210> 4699  
 <211> 315  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -20...-1  
 <223> score 10  
 seq SLLLXLLVASGDA/DM

<400> 4699  
 Met Gly Pro Glu Ala Leu Ser Ser Leu Leu Leu Xaa Leu Leu Val Ala  
 -20                  -15                  -10                  -5  
 Ser Gly Asp Ala Asp Met Lys Gly His Phe Asp Pro Ala Xaa Cys Arg  
                   1                  5                  10  
 Tyr Ala Leu Gly Met Gln Asp Arg Thr Ile Pro Asp Ser Asp Ile Ser  
           15                  20                  25  
 Ala Ser Ser Ser Trp Ser Asp Ser Thr Ala Ala Xaa His Ser Arg Leu  
           30                  35                  40  
 Glu Ser Ser Asp Gly Asp Xaa Ala Trp Cys Xaa Gln Val Arg Cys Phe  
 45                  50                  55                  60  
 Xaa Gly Gly Gly Val Leu Ala Gly Gly Ser Thr Thr Thr Ala Pro Gly  
                   65                  70                  75  
 Gly Ser Gly Gly His Pro Gly Thr Ala  
                   80                  85

<210> 4700  
 <211> 204

<212> PRT  
 <213> Homo sapiens  
 <220>  
 <221> SIGNAL  
 <222> -26...-1  
 <223> score 10  
 seq FFLMLLAMGLSSA/IG

<400> 4700  
 Met Ser Phe Leu Pro Pro Ser Val Phe Trp Ser Phe Ile Phe Phe Leu  
 -25 -20 -15  
 Met Leu Leu Ala Met Gly Leu Ser Ser Ala Ile Gly Ile Met Gln Gly  
 -10 -5 1 5  
 Ile Ile Thr Pro Leu Gln Asp Thr Phe Ser Phe Phe Arg Lys His Thr  
 10 15 20  
 Lys Leu Leu Ile Val Gly Val Phe Leu Leu Met Phe Val Cys Gly Leu  
 25 30 35  
 Phe Phe Thr Arg  
 40

<210> 4701  
 <211> 192  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -14...-1  
 <223> score 3.7  
 seq VLLARCEGHCSQA/SR

<400> 4701  
 Met Val Leu Leu Ala Arg Cys Glu Gly His Cys Ser Gln Ala Ser Arg  
 -10 -5 1  
 Ser Glu Pro Leu Val Ser Xaa Ser Thr Val Leu Lys Gln Pro Phe Arg  
 5 10 15  
 Ser Ser Cys His Cys Cys Arg Pro Gln Thr Ser Lys Leu Lys Ala Leu  
 20 25 30  
 Arg Leu Arg Cys Ser Gly Gly Met Arg Leu Thr Ala Thr Tyr Arg Tyr  
 35 40 45 50

<210> 4702  
 <211> 273  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -21...-1  
 <223> score 9.6  
 seq CLAFLCFLMHARG/QR

<400> 4702  
Met Glu Ser Trp Trp Gly Leu Pro Cys Leu Ala Phe Leu Cys Phe Leu  
-20 -15 -10  
Met His Ala Arg Gly Gln Arg Asp Phe Asp Leu Ala Asp Ala Leu Asp  
-5 1 5 10  
Asp Pro Glu Pro Thr Lys Lys Pro Asn Ser Asp Ile Tyr Pro Lys Pro  
15 20 25  
Lys Pro Pro Tyr Tyr Pro Gln Pro Glu Asn Pro Asp Ser Gly Gly Asn  
30 35 40  
Xaa Tyr Pro Arg Pro Lys Pro Arg Pro Gln Pro Gln Pro Gly Asn Ser  
45 50 55  
Gly Asn Ser Gly Gly Xaa Ser Met Met Trp Thr  
60 65 70

<210> 4703  
<211> 369  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -42...-1  
<223> score 5.2  
seq ILSILMGASAITG/IM

<400> 4703  
Met Gly Leu Ala Phe Leu Tyr Met Thr Val Leu Gly Phe Asp Cys Ile  
-40 -35 -30  
Thr Thr Gly Tyr Ala Tyr Thr Gln Gly Leu Ser Gly Ser Ile Leu Ser  
-25 -20 -15  
Ile Leu Met Gly Ala Ser Ala Ile Thr Gly Ile Met Gly Thr Val Ala  
-10 -5 1 5  
Phe Thr Trp Leu Arg Arg Lys Cys Gly Leu Val Arg Thr Gly Leu Ile  
10 15 20  
Ser Gly Leu Ala Gln Leu Ser Cys Leu Ile Leu Cys Val Ile Ser Val  
25 30 35  
Phe Met Pro Gly Ser Pro Leu Asp Leu Ser Val Ser Pro Phe Xaa Asp  
40 45 50  
Ile Arg Ser Arg Phe Ile Gln Gly Glu Ser Ile Thr Pro Thr Lys Ile  
55 60 65 70  
Pro Xaa Ile Thr Thr Xaa Ile Tyr Met Ser Asn  
75 80

<210> 4704  
<211> 189  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SIGNAL  
<222> -26...-1

<223> score 5.7  
seq AGLALGMLCLGHG/SN

<400> 4704

Met	Glu	Tyr	Cys	Thr	Asp	Arg	Glu	Ser	Tyr	Ser	Leu	Ala	Ala	Gly	Leu
-25						-20					-15				
Ala	Leu	Gly	Met	Leu	Cys	Leu	Gly	His	Gly	Ser	Asn	Leu	Ile	Gly	Met
-10				-5					1					5	
Ser	Asp	Leu	Asn	Val	Pro	Glu	Gln	Leu	Tyr	Gln	Xaa	Met	Val	Gly	Gly
		10					15						20		
His	Arg	Arg	Phe	Gln	Thr	Gly	Met	His	Arg	Glu	Lys	His	Lys	Ser	
	25						30					35			

<210> 4705

<211> 324

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -16...-1

<223> score 8.5

seq ALLLLATLAVATG/PA

<400> 4705

Met	Arg	Thr	Ala	Leu	Leu	Leu	Leu	Ala	Thr	Leu	Ala	Val	Ala	Thr	Gly
-15						-10					-5				
Pro	Ala	Leu	Thr	Leu	Arg	Cys	His	Val	Cys	Thr	Ser	Ser	Ser	Asn	Cys
1				5					10					15	
Lys	His	Ser	Val	Val	Cys	Pro	Ala	Ser	Ser	Arg	Phe	Cys	Lys	Thr	Thr
			20					25					30		
Asn	Thr	Val	Glu	Pro	Leu	Arg	Gly	Asn	Leu	Val	Lys	Lys	Asp	Cys	Ala
			35				40					45			
Glu	Ser	Cys	Thr	Pro	Ser	Tyr	Thr	Leu	Gln	Gly	Gln	Val	Ser	Ser	Gly
			50				55				60				
Thr	Ser	Ser	Thr	Gln	Cys	Cys	Gln	Glu	Asp	Leu	Cys	Asn	Glu	Lys	Leu
65					70				75						80
His	Asn	Ala	Ala	Pro	Thr	Arg	Thr	Ala	Leu	Ala	Gln				
				85					90						

<210> 4706

<211> 156

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -47...-1

<223> score 5.9

seq TWLGLLSFQNLHC/FP

004220"666T550

<400> 4706

Met His Gly Phe Glu Ile Ile Ser Leu Lys Glu Glu Ser Pro Leu Gly  
-45 -40 -35  
Lys Val Ser Gln Gly Pro Leu Phe Asn Val Thr Ser Gly Ser Ser Ser  
-30 -25 -20  
Pro Val Thr Trp Leu Gly Leu Leu Ser Phe Gln Asn Leu His Cys Phe  
-15 -10 -5 1  
Pro Asp Leu Pro  
5

<210> 4707

<211> 195

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -32...-1

<223> score 5.4

seq SVFTLTQLQAGLSA/IK

<400> 4707

Met Leu Ile Gln Gln Phe Arg Tyr Asp Asn Tyr Arg Leu His Gln Leu  
-30 -25 -20  
Gly Asn Asn Ser Val Phe Thr Leu Thr Leu Gln Ala Gly Leu Ser Ala  
-15 -10 -5  
Ile Lys Thr Pro Gln Cys Tyr Lys Glu Asp Gly Ser Ser Lys Ser Pro  
1 5 10 15  
Asp Cys Pro Val Cys Ser Arg Ser Leu Asn Lys Leu Ala His Pro Cys  
20 25 30  
Pro

<210> 4708

<211> 189

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -35...-1

<223> score 3.6

seq ITSVLLLFPRAGE/FP

<400> 4708

Met Pro Trp Cys Leu Leu Pro Val Leu Arg Phe Ser Val Ile Phe Leu  
-35 -30 -25 -20  
Phe Phe Gly Ala Val Ile Ile Thr Ser Val Leu Leu Leu Phe Pro Arg  
-15 -10 -5  
Ala Gly Glu Phe Pro Ala Pro Glu Val Glu Val Lys Ile Val Asp Asp  
1 5 10  
Phe Phe Ile Gly Arg Tyr Val Leu Leu Ala Phe Leu Ser Ala Thr  
15 20 25

<210> 4709  
 <211> 288  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -21...-1  
 <223> score 5.8  
 seq SLLFFLLLEGGKT/EQ

<400> 4709  
 Met Gly Gly Met Lys Tyr Ile Phe Ser Leu Leu Phe Phe Leu Leu Leu  
           -20                      -15                      -10  
 Glu Gly Gly Lys Thr Glu Gln Val Lys His Ser Glu Thr Tyr Cys Met  
       -5                      1                      5                      10  
 Phe Gln Asp Lys Lys Tyr Arg Val Gly Glu Arg Trp His Pro Tyr Leu  
                       15                      20                      25  
 Glu Pro Tyr Gly Leu Val Tyr Cys Val Asn Cys Ile Cys Ser Glu Asn  
           30                      35                      40  
 Gly Asn Val Leu Cys Ser Arg Val Arg Cys Pro Asn Val His Cys Leu  
       45                      50                      55  
 Ser Pro Val His Ile Pro His Leu Cys Cys Pro Arg Cys Pro Glu Glu  
       60                      65                      70                      75

<210> 4710  
 <211> 189  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -43...-1  
 <223> score 7  
 seq PWFLAPWCPGTQS/NR

<400> 4710  
 Met Arg Glu Thr Xaa Pro Leu Pro Lys Pro Leu Lys Asp Thr Ala Pro  
           -40                      -35                      -30  
 Ser Ser His Gly Val Gly Ser Asp Ser Pro Ser Ala Thr Arg Pro Trp  
           -25                      -20                      -15  
 Phe Leu Ala Pro Trp Cys Pro Gly Thr Gln Ser Asn Arg Ile Cys His  
       -10                      -5                      1                      5  
 Pro Pro Leu Ser Ser Pro Pro Asp Gln Ala Thr Cys Leu Arg Gly  
           10                      15                      20

<210> 4711  
 <211> 282  
 <212> PRT  
 <213> Homo sapiens



<220>  
 <221> SIGNAL  
 <222> -46...-1  
 <223> score 7.8  
 seq LLYLSFAALGVVA/LR

<400> 4711  
 Met Val Phe Gly Tyr Trp Lys Gln Pro Leu Ile Thr Leu Ala Lys Lys  
 -45 -40 -35  
 Ser Val Lys Cys Ala Arg Glu Cys Leu Arg Cys Ser Leu Arg Pro Leu  
 -30 -25 -20 -15  
 Val Leu Leu Tyr Leu Ser Phe Ala Ala Leu Gly Val Val Ala Leu Arg  
 -10 -5 1  
 Ser Val Glu Ser Pro Leu Ala Glu Thr His Ser Cys Trp Leu Ser Leu  
 5 10 15  
 Gly Met Cys Val Leu Gln Cys Glu Gln Gln Trp Val Pro Thr Pro Val  
 20 25 30  
 Ser Phe Leu Cys Gly Leu Ser Gly Ser Ser Thr Ile Ile Val  
 35 40 45

<210> 4712  
 <211> 204  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -22...-1  
 <223> score 5.9  
 seq LLILWFHLDCVSS/IL

<400> 4712  
 Met Glu Lys Asn Pro Leu Ala Ala Pro Leu Leu Ile Leu Trp Phe His  
 -20 -15 -10  
 Leu Asp Cys Val Ser Ser Ile Leu Asn Val Glu Gln Ser Pro Gln Ser  
 -5 1 5 10  
 Leu His Val Gln Glu Gly Asp Ser Thr Asn Phe Thr Cys Ser Phe Pro  
 15 20 25  
 Ser Ser Asn Phe Tyr Ala Leu His Trp Tyr Arg Trp Glu Thr Ala Lys  
 30 35 40  
 Ser Pro Glu Ala  
 45

<210> 4713  
 <211> 276  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -18...-1  
 <223> score 5

seq SLSVFGSLPASLG/TW

<400> 4713

```

Met Asp Arg Pro Gly Ser Leu Ser Val Phe Gly Ser Leu Pro Ala Ser
      -15                      -10                      -5
Leu Gly Thr Trp Leu Ser Ser Pro Ala Trp Leu Val Asp Arg Pro Val
      1                      5                      10
Arg Ser Ala His Pro Ser Ala Asn Ser Thr Gly Val Arg Met Ser Val
15                      20                      25                      30
Leu Val Val Leu Ala Leu Arg Ser Leu Gly Arg Ser Cys Ser Leu Ser
      35                      40                      45
Gln Ala Ala Pro Ser Arg Trp Thr Arg Ser Asn Asp Ala Pro Gln Pro
      50                      55                      60
Pro Gly Ser Gln His Ile Phe His Thr Xaa Val Pro
      65                      70

```

<210> 4714

<211> 207

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -29...-1

<223> score 4.4

seq IVLHLVLQGMVYT/EY

<400> 4714

```

Met His Gly Leu Leu His Tyr Leu Phe His Thr Arg Asn His Thr Phe
      -25                      -20                      -15
Ile Val Leu His Leu Val Leu Gln Gly Met Val Tyr Thr Glu Tyr Thr
      -10                      -5                      1
Trp Glu Val Phe Gly Tyr Cys Gln Glu Leu Glu Leu Ser Leu His Tyr
      5                      10                      15
Leu Leu Leu Pro Tyr Leu Leu Leu Gly Val Asn Leu Phe Phe Phe Thr
20                      25                      30                      35
Leu Thr Cys Gly Thr
      40

```

<210> 4715

<211> 159

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -46...-1

<223> score 5.2

seq LLTFLVFTXKLSS/LN

<400> 4715

Met Leu Met Cys Lys Met Leu Lys Ser Gln Lys Asn Cys Gln Glu Asn  
 -45 -40 -35  
 Xaa Xaa Ile Lys Ile Ile Leu Phe Leu Lys Pro Met Cys Ser Pro Gln  
 -30 -25 -20 -15  
 Tyr Leu Leu Thr Phe Leu Val Phe Thr Xaa Lys Leu Ser Ser Leu Asn  
 -10 -5 1  
 Ile Xaa Lys Phe His  
 5

<210> 4716  
 <211> 204  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -13...-1  
 <223> score 4.2  
 seq MTDLLSASPWALT/IV

<400> 4716  
 Met Thr Asp Leu Leu Ser Ala Ser Pro Trp Ala Leu Thr Ile Val Ser  
 -10 -5 1  
 Ser Glu Leu His Leu Ala Pro Ser Met Thr Thr Val Asp Gln Leu Glu  
 5 10 15  
 Ser Gln Val Asp Asn Val Ile Leu Gln Thr Gly Glu Ser Ala Ser Glu  
 20 25 30 35  
 Cys Phe Cys Leu Gln Cys Pro Ser Leu Gly Asn Ile Glu Gly Gly Val  
 40 45 50  
 Ala Thr Gly His  
 55

<210> 4717  
 <211> 324  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -42...-1  
 <223> score 5.5  
 seq ILGLLFYCFFLCC/FP

<400> 4717  
 Met Arg Ile Asp Asn Lys Tyr Phe Tyr Tyr Asn Ser Ala His Thr Tyr  
 -40 -35 -30  
 Ile Leu Cys Met Gln Cys Ile Cys Ile Glu Gln Phe Leu Ile Leu Gly  
 -25 -20 -15  
 Leu Leu Phe Tyr Cys Phe Phe Leu Cys Cys Phe Pro Phe Ala Ser Asn  
 -10 -5 1 5  
 Ile Thr Val Leu Tyr Phe Val Asn Lys Asn Gln Ile Met His Ile Arg  
 10 15 20

Ile Phe Ile Trp Lys Lys Ser Phe Xaa Ala Phe Pro Leu Phe Pro Cys  
 25 30 35  
 Lys Gly Thr Xaa Phe Cys Tyr Gly Phe Ser Leu Tyr Lys Ile Ile Ile  
 40 45 50  
 Ser Tyr Met Thr Tyr Ala Lys Ile Ser Trp Arg Val  
 55 60 65

<210> 4718  
 <211> 303  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -29...-1  
 <223> score 5.7  
 seq FIYYLFFLRWSLS/LS

<400> 4718  
 Met Leu Ile Ile Asp Pro Gln Thr Ser Thr Phe Cys Leu Phe Tyr Leu  
 -25 -20 -15  
 Phe Ile Tyr Tyr Leu Phe Phe Leu Arg Trp Ser Leu Ser Leu Ser Pro  
 -10 -5 1  
 Arg Leu Glu Cys Ser Gly Thr Ile Leu Ala His Cys Lys Leu Cys Leu  
 5 10 15  
 Pro Ser Ser His His Ser Pro Thr Ser Ala Ser Gln Val Ala Gly Thr  
 20 25 30 35  
 Thr Gly Ala Arg His His Ala Trp Leu Ile Phe Phe Phe Xaa Ile Phe  
 40 45 50  
 Ser Arg Asp Arg Val Ser Pro Cys Xaa Pro Gly Trp Ser Arg Cys Pro  
 55 60 65  
 Asp Leu Val Ile Pro  
 70

<210> 4719  
 <211> 252  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -41...-1  
 <223> score 5.6  
 seq LFLFLTSIAEXCS/TP

<400> 4719  
 Met Val Xaa Trp Leu Val Leu Phe Ala Leu Gln Ile Tyr Ser Tyr Xaa  
 -40 -35 -30  
 Ser Thr Arg Asp Gln Pro Ala Ser Arg Xaa Arg Leu Leu Phe Leu Phe  
 -25 -20 -15 -10  
 Leu Thr Ser Ile Ala Glu Xaa Cys Ser Thr Pro Tyr Ser Leu Leu Gly  
 -5 1 5

Xaa Val Phe Thr Val Ser Phe Val Ala Leu Gly Val Leu Thr Leu Cys  
 10 15 20  
 Lys Phe Tyr Leu Gln Gly Tyr Arg Ala Phe Met Asn Asp Pro Ala Met  
 25 30 35  
 Asn Arg Gly Gly  
 40

<210> 4720  
 <211> 177  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -28..-1  
 <223> score 6.1  
 seq LYLFSGFWTFXLG/KF

<400> 4720  
 Met Asn Lys Glu Xaa Val Ser Xaa Glu Arg Xaa Ala Gln Val Arg Leu  
 -25 -20 -15  
 Tyr Leu Phe Ser Gly Phe Trp Thr Phe Xaa Leu Gly Lys Phe Lys Gln  
 -10 -5 1  
 Gly Glu Xaa Ser Tyr Xaa Xaa Ile Leu Glu Arg Leu Leu Trp Gln Gln  
 5 10 15 20  
 Gln Tyr Xaa Gly Trp Leu Val Gly Asp Lys Arg  
 25 30

<210> 4721  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -41..-1  
 <223> score 7.7  
 seq LLCLGQLHHPGLG/RV

<400> 4721  
 Met Glu Leu Pro Ala Val Asn Leu Glu Ser Asp Ser Pro Arg Ser Leu  
 -40 -35 -30  
 Ala Ala Asp Asn Leu Gly Leu His Cys Ile Leu Arg Leu Leu Cys Leu  
 -25 -20 -15 -10  
 Gly Gln Leu His His Pro Gly Leu Gly Arg Val Gly Cys Gly Ser Ala  
 -5 1 5  
 Gly Leu His Arg Arg  
 10

<210> 4722  
 <211> 213  
 <212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -24...-1

<223> score 4.4

seq FVFLFWGVFETRS/LS

<400> 4722

Met	Thr	Val	His	Ile	Glu	Leu	Pro	Leu	Leu	Cys	Phe	Val	Phe	Leu	Phe
			-20						-15					-10	
Trp	Gly	Val	Phe	Glu	Thr	Arg	Ser	Leu	Ser	Leu	Ser	Pro	Arg	Leu	Glu
		-5					1				5				
Xaa	Lys	Leu	Val	Glu	Xaa	Met	Xaa	His	Cys	Ser	Ile	Lys	Leu	Leu	Gly
	10					15					20				
Ser	Ser	Asp	Pro	Pro	Ala	Ser	Ala	Phe	Leu	Val	Ala	Gly	Thr	Thr	Gly
25				30					35						40
Thr	Cys	His	Asp	Thr	Gln	Pro									
				45											

<210> 4723

<211> 162

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -42...-1

<223> score 4.6

seq LLTCLCLHLKCVS/YR

<400> 4723

Met	Gly	Asn	Thr	Lys	Met	Lys	Arg	Tyr	Pro	Asp	Ser	Gln	Ser	Ala	Gly
		-40					-35					-30			
Ile	Thr	Gly	Val	Ser	His	Arg	Ala	Arg	Pro	Phe	His	Leu	Leu	Leu	Thr
		-25				-20				-15					
Cys	Leu	Cys	Leu	His	Leu	Lys	Cys	Val	Ser	Tyr	Arg	His	Leu	Val	Phe
-10				-5					1				5		
Thr	Phe	Leu	Ser	Val	Leu										
				10											

<210> 4724

<211> 234

<212> PRT

<213> Homo sapiens

<220>

<221> SIGNAL

<222> -26...-1

<223> score 3.7

seq RLLEARSSRPAAWA/XT

<400> 4724  
 Met Pro Val Ile Leu Ala Leu Trp Glu Ala Lys Val Gly Arg Leu Leu  
           -25                          -20                          -15  
 Glu Ala Arg Ser Ser Arg Pro Ala Trp Ala Xaa Thr Val Xaa Pro Gln  
           -10                          -5                          1                          5  
 Phe Ser Xaa Xaa Xaa Lys Xaa Ile Xaa Ile Lys Glu Ile Tyr Leu Glu  
                   10                          15                          20  
 Xaa Xaa Lys Xaa Ile Tyr Ser Gly Arg Ala Arg Trp Leu Met Pro Val  
           25                          30                          35  
 Ile Pro Thr Leu Gly Arg Gln Gly Gly Arg Ile Ala Xaa Gly  
           40                          45                          50

<210> 4725  
 <211> 282  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -21..-1  
 <223> score 5.3  
       seq ALTLVLLIKESGA/WS

<400> 4725  
 Met Ile Ala Ser Gln Phe Leu Ser Ala Leu Thr Leu Val Leu Leu Ile  
           -20                          -15                          -10  
 Lys Glu Ser Gly Ala Trp Ser Tyr Asn Thr Ser Thr Glu Ala Met Thr  
           -5                          1                          5                          10  
 Tyr Asp Glu Ala Ser Ala Tyr Cys Gln Gln Arg Tyr Thr His Leu Val  
                   15                          20                          25  
 Ala Ile Gln Asn Lys Glu Glu Ile Glu Tyr Leu Asn Ser Ile Leu Lys  
           30                          35                          40  
 Leu Phe Xaa Lys Leu Leu Leu Asp Trp Asn Gln Lys Ser Gln Gln Cys  
           45                          50                          55  
 Val Gly Leu Gly Arg Xaa Pro Glu Thr Ser Asp Arg Arg Ser  
           60                          65                          70

<210> 4726  
 <211> 207  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -38..-1  
 <223> score 8.2  
       seq LLLIFLSFPYTLC/IL

<400> 4726  
 Met Ser Gly Leu Phe Pro Val Pro Val Arg Val Asn Val Asp Ile Ala  
           -35                          -30                          -25

Gln Asn Ile Thr Cys Ser Ser Phe Ser Leu Leu Leu Ile Phe Leu Ser  
 -20 -15 -10  
 Phe Pro Tyr Thr Leu Cys Ile Leu Tyr Arg Val Lys Ser Tyr Thr Pro  
 -5 1 5 10  
 Thr Glu Ser Ile Thr Ala Phe Asn Leu Thr Ile Gly Xaa Phe Pro Tyr  
 15 20 25  
 Leu Xaa Xaa Ser Thr  
 30

<210> 4727  
 <211> 198  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -13...-1  
 <223> score 5.7  
 seq MIVLLVMLGDILA/GL

<400> 4727  
 Met Ile Val Leu Leu Val Met Leu Gly Asp Ile Leu Ala Gly Leu Phe  
 -10 -5 1  
 Leu Lys Gly Ile Cys Tyr Phe Ser Gly Ile Lys Cys Pro His Thr Ala  
 5 10 15  
 Val Ser His Xaa Xaa His Phe Ile Ser Arg Ile Xaa Ser Gln Ser Gln  
 20 25 30 35  
 Thr Glu Thr Ile Pro Phe Lys Gln Gln Arg Ser Pro Phe Pro Pro Pro  
 40 45 50  
 Pro Lys

<210> 4728  
 <211> 189  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -19...-1  
 <223> score 7.4  
 seq LGFLXXSLESTLS/IX

<400> 4728  
 Met Arg Ala Leu Leu Leu Leu Gly Phe Leu Xaa Xaa Ser Leu Glu Ser  
 -15 -10 -5  
 Thr Leu Ser Ile Xaa Pro Trp Glu Ala Pro Lys Glu His Lys Tyr Lys  
 1 5 10  
 Ala Glu Glu His Thr Val Val Leu Thr Val Thr Gly Glu Pro Cys His  
 15 20 25  
 Phe Pro Phe Gln Tyr His Arg Gln Leu Tyr His Lys Cys Thr His  
 30 35 40



<210> 4729  
 <211> 210  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SIGNAL  
 <222> -28..-1  
 <223> score 4.5  
 seq LRWSLTLLPRLEC/GF

<400> 4729  
 Met Ala Cys Thr Ser Cys Leu Ala Asp Leu Lys Lys Ile Phe Phe Leu  
                   -25                  -20                  -15  
 Arg Trp Ser Leu Thr Leu Leu Pro Arg Leu Glu Cys Gly Phe Met Ile  
                   -10                  -5                  1  
 Leu Ala Tyr Leu Gln Pro Xaa Xaa Ala Gly Phe Lys Gln Phe Phe Cys  
 5                                  10                  15                  20  
 Leu Ser Leu Pro Ser Ser Trp Asp Xaa Arg Arg Gly Pro Ala Asn Phe  
                                   25                  30                  35  
 Xaa Ile Phe Ser Arg Asp  
                   40

<210> 4730  
 <211> 231  
 <212> PRT  
 <213> Homo sapiens

<400> 4730  
 Met Ala Pro Val Lys Lys Leu Val Val Lys Gly Gly Lys Lys Lys Lys  
 1                  5                  10                  15  
 Gln Val Leu Lys Phe Thr Leu Asp Cys Thr His Pro Val Glu Asp Gly  
                   20                  25                  30  
 Ile Met Asp Ala Ala Asn Phe Glu Gln Phe Leu Gln Glu Arg Ile Lys  
                   35                  40                  45  
 Val Asn Gly Lys Ala Gly Asn Leu Gly Gly Gly Val Val Thr Ile Glu  
                   50                  55                  60  
 Arg Ser Lys Ser Lys Ile Thr Ser Ser Thr Ile Ser Pro  
 65                                  70                  75

<210> 4731  
 <211> 186  
 <212> PRT  
 <213> Homo sapiens

<400> 4731  
 Met Met Gln Ile Xaa Xaa Thr Gly Phe Leu Asn Gly Lys Asn Ala Arg  
 1                  5                  10                  15  
 Glu Phe Met Gly Glu Leu Trp Pro Leu Leu Leu Ser Ala Gln Glu Asn  
                   20                  25                  30  
 Ile Ala Gly Ile Pro Ser Ala Phe Leu Glu Leu Lys Lys Glu Xaa Ile  
                   35                  40                  45  
 Lys Gln Arg Gln Ile Glu Gln Glu Lys Leu Ala Ser Met Lys

50

55

60

<210> 4732  
 <211> 405  
 <212> PRT  
 <213> Homo sapiens

<400> 4732

Met	Asp	Ser	Gln	Arg	Glu	Leu	Ala	Glu	Glu	Leu	Arg	Leu	Tyr	Gln	Ser
1			5						10					15	
Thr	Leu	Leu	Gln	Asp	Gly	Leu	Lys	Asp	Leu	Leu	Asp	Glu	Lys	Lys	Phe
			20					25					30		
Ile	Asp	Cys	Thr	Leu	Lys	Ala	Gly	Asp	Lys	Ser	Leu	Pro	Cys	His	Arg
		35					40					45			
Leu	Ile	Leu	Ser	Ala	Cys	Ser	Pro	Tyr	Phe	Arg	Glu	Tyr	Phe	Leu	Ser
	50					55					60				
Glu	Ile	Asp	Glu	Ala	Lys	Lys	Lys	Glu	Val	Val	Leu	Asp	Asn	Val	Asp
65					70					75				80	
Pro	Ala	Ile	Leu	Asp	Leu	Ile	Ile	Lys	Tyr	Leu	Tyr	Ser	Ala	Ser	Ile
				85					90					95	
Asp	Leu	Asn	Asp	Gly	Asn	Val	Gln	Asp	Ile	Phe	Ala	Leu	Ala	Ser	Arg
			100					105					110		
Phe	Gln	Ile	Pro	Ser	Val	Phe	Thr	Val	Cys	Val	Ser	Tyr	Leu	Gln	Lys
		115					120						125		
Arg	Leu	Ala	Pro	Gly	Asn	Cys									
	130					135									

<210> 4733  
 <211> 663  
 <212> PRT  
 <213> Homo sapiens

<400> 4733

Met	Ser	Val	Ser	Ala	Asp	Glu	Arg	Gly	Gly	Leu	Glu	Asn	Met	Arg	Pro
1				5					10					15	
Pro	Asn	Asn	Ser	Ser	Pro	Val	Gln	Glu	Asp	Ala	Glu	Asn	Ala	Ser	Cys
			20					25					30		
Glu	Leu	Cys	Gly	Leu	Thr	Ile	Thr	Glu	Glu	Asp	Leu	Ser	Ser	His	Tyr
		35					40					45			
Leu	Ala	Lys	His	Ile	Glu	Asn	Ile	Cys	Ala	Cys	Gly	Lys	Cys	Gly	Gln
	50					55					60				
Ile	Leu	Val	Lys	Gly	Arg	Gln	Leu	Gln	Glu	His	Ala	Gln	Xaa	Cys	Gly
65					70				75					80	
Glu	Pro	Gln	Asp	Leu	Thr	Met	Asn	Gly	Leu	Gly	Asn	Thr	Glu	Glu	Lys
			85					90					95		
Met	Asp	Leu	Glu	Glu	Asn	Pro	Asp	Glu	Gln	Ser	Glu	Ile	Arg	Asp	Met
			100					105					110		
Phe	Val	Glu	Met	Leu	Asp	Asp	Phe	Arg	Asp	Asn	His	Tyr	Gln	Ile	Asn
		115					120					125			
Ser	Ile	Gln	Lys	Lys	Gln	Leu	Phe	Lys	His	Ser	Ala	Cys	Pro	Phe	Arg
		130				135					140				
Cys	Pro	Asn	Cys	Gly	Gln	Arg	Phe	Glu	Thr	Glu	Asn	Leu	Val	Val	Glu
145					150					155				160	
His	Met	Ser	Ser	Cys	Leu	Asp	Gln	Asp	Met	Phe	Lys	Ser	Ala	Ile	Met

165                      170                      175  
 Glu Glu Asn Glu Arg Asp His Arg Arg Lys His Phe Cys Asn Leu Cys  
                          180                      185                      190  
 Gly Lys Gly Phe Tyr Gln Arg Cys His Leu Arg Glu His Tyr Thr Val  
                          195                      200                      205  
 His Thr Lys Glu Lys Gln Phe Val Cys Gln Thr Cys Gly  
                          210                      215                      220

<210> 4734  
 <211> 312  
 <212> PRT  
 <213> Homo sapiens

<400> 4734  
 Met Glu Pro Gln Glu Glu Arg Glu Thr Gln Val Ala Ala Trp Leu Lys  
 1                      5                      10                      15  
 Lys Ile Phe Gly Asp His Pro Ile Pro Gln Tyr Glu Val Asn Pro Arg  
                          20                      25                      30  
 Thr Thr Glu Ile Leu His His Leu Ser Glu Arg Asn Arg Val Arg Asp  
                          35                      40                      45  
 Arg Asp Val Tyr Leu Val Ile Glu Asp Leu Lys Gln Lys Ala Ser Glu  
                          50                      55                      60  
 Tyr Glu Ser Glu Ala Lys Tyr Leu Gln Asp Leu Leu Met Glu Ser Val  
 65                      70                      75                      80  
 Asn Phe Ser Pro Ala Asn Leu Ser Ser Thr Gly Ser Arg Tyr Leu Asn  
                          85                      90                      95  
 Ala Leu Val Asp Ser Ala Val Ala  
                          100

<210> 4735  
 <211> 219  
 <212> PRT  
 <213> Homo sapiens

<400> 4735  
 Met Glu Gly Leu Glu Glu Asn Gly Gly Val Val Gln Val Gly Glu Leu  
 1                      5                      10                      15  
 Leu Pro Cys Lys Ile Cys Gly Arg Thr Phe Phe Pro Val Ala Leu Lys  
                          20                      25                      30  
 Lys His Gly Pro Ile Cys Gln Lys Thr Ala Thr Lys Lys Arg Lys Thr  
                          35                      40                      45  
 Phe Asp Ser Ser Arg Gln Arg Ala Glu Gly Thr Asp Ile Pro Thr Val  
                          50                      55                      60  
 Lys Pro Leu Lys Pro Arg Pro Glu Pro  
 65                      70

<210> 4736  
 <211> 273  
 <212> PRT  
 <213> Homo sapiens

<400> 4736  
 Met Leu Ser His Asn Thr Met Met Lys Gln Arg Lys Gln Gln Ala Thr  
 1                      5                      10                      15

Ala Ile Met Lys Glu Val His Gly Asn Asp Val Asp Gly Met Asp Leu  
                   20                  25                  30  
 Gly Lys Lys Val Ser Ile Pro Arg Asp Ile Met Leu Glu Glu Leu Ser  
                   35                  40                  45  
 His Leu Ser Asn Arg Gly Ala Arg Leu Phe Lys Met Arg Gln Arg Arg  
                   50                  55                  60  
 Ser Asp Lys Tyr Thr Phe Glu Asn Phe Gln Tyr Gln Ser Arg Ala Gln  
 65                  70                  75                  80  
 Ile Asn His Ser Ile Ala Met Gln Asn Gly Lys  
                   85                  90

<210> 4737  
 <211> 201  
 <212> PRT  
 <213> Homo sapiens

<400> 4737  
 Met Ser Leu Leu Phe Thr Arg Cys Asn Ser Ile Val Thr Val Lys Lys  
 1                  5                  10                  15  
 Asn Lys Arg His Xaa Xaa Glu Val Asn Ala Ser Pro Leu Lys His Phe  
                   20                  25                  30  
 Val Thr Ala Lys Lys Lys Ile Asn Gly Ile Phe Glu Gln Leu Gly Ala  
                   35                  40                  45  
 Tyr Ile Gln Glu Ser Ala Thr Phe Leu Glu Asp Thr Tyr Arg Asn Ala  
 50                  55                  60  
 Glu Leu Asp  
 65

<210> 4738  
 <211> 222  
 <212> PRT  
 <213> Homo sapiens

<400> 4738  
 Met Gly Arg Lys Asp Ala Xaa Thr Ile Lys Leu Pro Val Asp Gln Tyr  
 1                  5                  10                  15  
 Arg Lys Gln Ile Gly Lys Gln Asp Tyr Lys Lys Thr Lys Pro Ile Leu  
                   20                  25                  30  
 Arg Ala Thr Lys Leu Lys Ala Glu Ala Lys Lys Thr Ala Ile Gly Ile  
                   35                  40                  45  
 Lys Leu Ala Leu Tyr Leu Gln Leu Tyr Trp His Tyr Tyr Trp Leu Ser  
 50                  55                  60  
 Met Leu Ser Xaa Ile Ser Asp Ser Pro Arg  
 65                  70

<210> 4739  
 <211> 228  
 <212> PRT  
 <213> Homo sapiens

<400> 4739  
 Met Gly Arg Lys Asp Ala Ala Thr Ile Lys Leu Pro Xaa Asp Gln Tyr  
 1                  5                  10                  15  
 Arg Lys Gln Ile Gly Lys Gln Asp Tyr Lys Lys Thr Lys Pro Ile Leu

	20					25					30				
Arg	Ala	Thr	Lys	Leu	Lys	Ala	Glu	Ala	Lys	Lys	Thr	Ala	Ile	Gly	Ile
	35						40					45			
Lys	Glu	Val	Gly	Leu	Val	Leu	Ala	Ala	Ile	Leu	Ala	Leu	Leu	Leu	Ala
	50					55					60				
Phe	Tyr	Ala	Phe	Xaa	Tyr	Leu	Arg	Leu	Thr	Thr	Thr	Asp			
65					70					75					

&lt;210&gt; 4740

&lt;211&gt; 345

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4740

Met	Lys	Glu	Thr	Ile	Met	Asn	Gln	Glu	Lys	Leu	Ala	Lys	Leu	Gln	Ala
1				5					10					15	
Gln	Val	Arg	Ile	Gly	Gly	Lys	Gly	Thr	Ala	Arg	Arg	Lys	Lys	Lys	Val
			20					25					30		
Val	His	Arg	Thr	Ala	Thr	Ala	Asp	Asp	Lys	Lys	Leu	Gln	Phe	Ser	Leu
	35					40					45				
Lys	Lys	Leu	Gly	Val	Asn	Asn	Ile	Ser	Gly	Ile	Glu	Glu	Val	Asn	Met
	50				55						60				
Phe	Thr	Asn	Gln	Gly	Thr	Val	Ile	His	Phe	Asn	Asn	Pro	Lys	Val	Gln
65					70					75					80
Ala	Ser	Leu	Ala	Ala	Asn	Thr	Phe	Thr	Ile	Thr	Gly	His	Ala	Glu	Thr
			85					90						95	
Lys	Gln	Leu	Thr	Glu	Met	Leu	Pro	Ser	Ile	Leu	Asn	Gln	Leu	Gly	Ala
			100					105					110		
Asp	Ser	Leu													
		115													

&lt;210&gt; 4741

&lt;211&gt; 366

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4741

Met	Ala	Asp	Leu	Ala	Asn	Glu	Glu	Lys	Pro	Ala	Ile	Ala	Pro	Pro	Val
1				5					10					15	
Phe	Val	Phe	Gln	Lys	Asp	Lys	Gly	Gln	Lys	Arg	Ser	Ala	Gly	Gly	Ser
			20					25					30		
Ser	Pro	Glu	Gly	Gly	Glu	Asp	Ser	Asp	Arg	Glu	Asp	Gly	Asn	Tyr	Cys
	35					40					45				
Pro	Pro	Val	Lys	Arg	Glu	Arg	Thr	Ser	Ser	Leu	Thr	Gln	Phe	Pro	Pro
	50				55					60					
Ser	Gln	Ser	Glu	Glu	Arg	Ser	Ser	Gly	Phe	Arg	Leu	Lys	Pro	Pro	Thr
65					70				75						80
Leu	Ile	His	Gly	Gln	Xaa	Pro	Ser	Ala	Gly	Leu	Pro	Ser	Gln	Lys	Pro
			85					90					95		
Lys	Glu	Gln	Gln	Arg	Thr	Xaa	Leu	Arg	Pro	Ala	Val	Leu	Gln	Ala	Pro
			100					105					110		
Gln	Pro	Lys	Ala	Leu	Ser	Gln	Xaa	Val	Pro						
		115					120								

<210> 4742  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 4742  
 Met Glu Gly Ile Ser Asn Phe Lys Thr Pro Ser Lys Leu Ser Glu Lys  
 1 5 10 15  
 Lys Lys Ser Val Leu Cys Ser Thr Pro Thr Ile Asn Ile Pro Ala Ser  
 20 25 30  
 Pro Phe Met Gln Lys Leu Gly Phe Gly Thr Gly Xaa Asn Val Val Xaa  
 35 40 45  
 Asn Glu Lys Ile Ser Lys Arg Phe Val Ser Phe Ser Leu  
 50 55 60

<210> 4743  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 4743  
 Met Met Lys Gly Glu Phe Tyr Val Ile Glu Tyr Ala Ala Cys Asp Ala  
 1 5 10 15  
 Thr Tyr Asn Glu Ile Val Thr Phe Glu Arg Leu Arg Pro Val Asn Gln  
 20 25 30  
 Asn Lys Thr Val Lys Lys Asn Thr Phe Phe Lys Cys Thr Val Asp Val  
 35 40 45  
 Pro Glu Asp Leu Arg Glu Ala Cys Ala Asn Glu Asn  
 50 55 60

<210> 4744  
 <211> 276  
 <212> PRT  
 <213> Homo sapiens

<400> 4744  
 Met Leu Arg Asp Gly Arg Phe Ala Cys Ala Ile Cys Pro His Arg Pro  
 1 5 10 15  
 Val Leu Asp Thr Leu Ala Met Leu Thr Ala His Arg Ala Gly Lys Lys  
 20 25 30  
 His Leu Ser Ser Leu Gln Leu Phe Tyr Gly Lys Lys Gln Pro Gly Lys  
 35 40 45  
 Glu Arg Lys Gln Asn Pro Lys His Gln Asn Glu Leu Arg Arg Glu Glu  
 50 55 60  
 Thr Lys Ala Glu Ala Pro Leu Leu Thr Gln Thr Arg Leu Ile Thr Gln  
 65 70 75 80  
 Ser Ala Leu His Arg Ala Pro His Tyr Asn Ser Cys  
 85 90

<210> 4745  
 <211> 357  
 <212> PRT  
 <213> Homo sapiens

<400> 4745

Met	Ser	Phe	Lys	Arg	Glu	Gly	Asp	Asp	Trp	Ser	Gln	Leu	Asn	Val	Leu
1				5					10					15	
Lys	Lys	Arg	Arg	Val	Gly	Asp	Leu	Leu	Ala	Ser	Tyr	Ile	Pro	Glu	Asp
			20					25					30		
Glu	Ala	Leu	Met	Leu	Arg	Asp	Gly	Arg	Phe	Ala	Cys	Ala	Ile	Cys	Pro
		35					40					45			
His	Arg	Pro	Val	Leu	Asp	Thr	Leu	Ala	Met	Leu	Thr	Ala	His	Arg	Ala
	50					55					60				
Gly	Lys	Lys	His	Leu	Ser	Ser	Leu	Gln	Leu	Phe	Tyr	Gly	Lys	Lys	Gln
65				70						75					80
Pro	Gly	Lys	Glu	Arg	Lys	Gln	Asn	Pro	Lys	His	Gln	Asn	Glu	Leu	Arg
			85						90				95		
Arg	Glu	Glu	Thr	Lys	Ala	Glu	Ala	Pro	Leu	Leu	Thr	Gln	Thr	Arg	Leu
			100					105					110		
Ile	Thr	Gln	Ser	Ala	Leu	His									
			115												

<210> 4746

<211> 225

<212> PRT

<213> Homo sapiens

<400> 4746

Met	Gly	Thr	Arg	Lys	Lys	Val	His	Ala	Phe	Val	Arg	Val	Lys	Pro	Thr
1				5					10					15	
Asp	Asp	Phe	Ala	His	Glu	Met	Ile	Arg	Tyr	Gly	Asp	Asp	Lys	Arg	Ser
			20					25					30		
Ile	Asp	Ile	His	Leu	Lys	Lys	Asp	Ile	Arg	Arg	Gly	Val	Val	Asn	Asn
		35					40					45			
Gln	Gln	Thr	Asp	Trp	Ser	Phe	Lys	Leu	Asp	Gly	Val	Leu	His	Asp	Ala
		50				55					60				
Ser	Gln	Asp	Leu	Val	Tyr	Glu	Thr	Val	Ala	Lys					
65				70						75					

<210> 4747

<211> 339

<212> PRT

<213> Homo sapiens

<400> 4747

Met	Asn	Pro	Gln	Ile	Arg	Asn	Pro	Met	Lys	Ala	Met	Tyr	Pro	Gly	Thr
1				5					10					15	
Phe	Tyr	Phe	Gln	Phe	Lys	Asn	Leu	Trp	Glu	Ala	Asn	Asp	Arg	Asn	Glu
			20					25					30		
Thr	Trp	Leu	Cys	Phe	Thr	Val	Glu	Gly	Ile	Lys	Arg	Arg	Ser	Val	Val
		35					40					45			
Ser	Trp	Lys	Thr	Gly	Val	Phe	Arg	Asn	Gln	Val	Asp	Ser	Glu	Thr	His
	50					55					60				
Cys	His	Ala	Glu	Arg	Cys	Phe	Leu	Ser	Trp	Phe	Cys	Asp	Asp	Ile	Leu
65				70						75				80	
Ser	Pro	Asn	Thr	Lys	Tyr	Gln	Val	Thr	Trp	Tyr	Thr	Ser	Trp	Ser	Pro
			85						90				95		
Cys	Pro	Asp	Cys	Ala	Gly	Glu	Val	Ala	Glu	Phe	Leu	Ala	Arg	His	Ser

004220"666T550

Asn 100 105 110

<210> 4748  
 <211> 441  
 <212> PRT  
 <213> Homo sapiens

<400> 4748  
 Met Ala Gly Arg Ser Met Gln Ala Ala Arg Cys Pro Thr Asp Glu Leu  
 1 5 10 15  
 Ser Leu Thr Asn Cys Ala Val Val Asn Glu Lys Asp Phe Gln Ser Gly  
 20 25 30  
 Gln His Val Ile Val Arg Thr Ser Pro Asn His Arg Tyr Thr Phe Thr  
 35 40 45  
 Leu Lys Thr His Pro Ser Val Val Pro Gly Ser Ile Ala Phe Ser Leu  
 50 55 60  
 Pro Gln Arg Lys Trp Ala Gly Leu Ser Ile Gly Gln Glu Ile Glu Val  
 65 70 75 80  
 Ser Leu Tyr Thr Phe Asp Lys Ala Lys Gln Cys Ile Gly Thr Met Thr  
 85 90 95  
 Ile Glu Ile Asp Phe Leu Gln Lys Lys Ser Ile Asp Ser Asn Pro Tyr  
 100 105 110  
 Asp Thr Asp Lys Met Ala Ala Glu Phe Ile Gln Gln Ser Thr Thr Arg  
 115 120 125  
 Pro Ser Gln Trp Asp Asn Ser Leu Ser Ser Ser Pro Ser Ser Glu Phe  
 130 135 140  
 Tyr Pro Phe  
 145

<210> 4749  
 <211> 444  
 <212> PRT  
 <213> Homo sapiens

<400> 4749  
 Met Ala Gly Arg Ser Met Gln Ala Ala Arg Cys Pro Thr Asp Glu Leu  
 1 5 10 15  
 Ser Leu Thr Asn Cys Ala Val Val Asn Glu Lys Asp Phe Gln Ser Gly  
 20 25 30  
 Gln His Val Ile Val Arg Thr Ser Pro Asn His Arg Tyr Thr Phe Thr  
 35 40 45  
 Leu Lys Thr His Pro Ser Val Val Pro Gly Ser Ile Ala Phe Ser Leu  
 50 55 60  
 Pro Gln Arg Lys Trp Ala Gly Leu Ser Ile Gly Gln Glu Ile Glu Val  
 65 70 75 80  
 Ser Leu Tyr Thr Phe Asp Lys Ala Lys Gln Cys Ile Gly Thr Met Thr  
 85 90 95  
 Ile Glu Ile Asp Phe Leu Gln Lys Lys Ser Ile Asp Ser Asn Pro Tyr  
 100 105 110  
 Asp Thr Asp Lys Met Ala Ala Xaa Phe Ile Gln Gln Phe Asn Asn Gln  
 115 120 125  
 Ala Phe Ser Val Gly Gln Gln Leu Val Phe Ser Phe Asn Glu Lys Leu  
 130 135 140



Phe Gly Leu Leu  
145

<210> 4750  
<211> 342  
<212> PRT  
<213> Homo sapiens

<400> 4750  
Met Gly Tyr Lys Leu Gln Asp Leu Thr Asp Val Gln Ile Met Ala Arg  
1 5 10 15  
Leu Gln Glu Glu Ser Leu Arg Gln Asp Tyr Ala Ser Thr Ser Ala Ser  
20 25 30  
Val Ser Arg His Ser Ser Ser Val Ser Leu Ser Ser Gly Lys Lys Gly  
35 40 45  
Thr Cys Ser Asp Gln Glu Tyr Asp Gln Tyr Ser Leu Glu Asp Glu Glu  
50 55 60  
Glu Phe Asp His Leu Pro Pro Pro Gln Pro Arg Leu Pro Arg Cys Ser  
65 70 75 80  
Pro Phe Gln Arg Gly Ile Pro His Ser Gln Thr Phe Ser Ser Ile Arg  
85 90 95  
Glu Cys Arg Arg Ser Pro Ser Ser Gln Tyr Phe Pro Ser Asn Asn Tyr  
100 105 110  
Gln Gln

<210> 4751  
<211> 243  
<212> PRT  
<213> Homo sapiens

<400> 4751  
Met Lys Arg Pro Lys Leu Lys Lys Ala Ser Lys Arg Met Thr Cys His  
1 5 10 15  
Lys Arg Tyr Lys Ile Gln Lys Lys Val Arg Glu His His Arg Lys Leu  
20 25 30  
Arg Lys Glu Ala Lys Lys Xaa Gly His Lys Lys Pro Arg Lys Asp Pro  
35 40 45  
Gly Val Pro Asn Ser Ala Pro Phe Lys Glu Ala Leu Leu Arg Glu Ala  
50 55 60  
Glu Leu Arg Lys Gln Arg Leu Xaa Glu Leu Xaa Gln Gln Gln Xaa Leu  
65 70 75 80  
Asp

<210> 4752  
<211> 300  
<212> PRT  
<213> Homo sapiens

<400> 4752  
Met Ile Val Asn Asn Leu Leu Lys Pro Ile Ser Val Glu Gly Ser Ser  
1 5 10 15  
Lys Lys Val Lys Thr Asp Thr Val Leu Ile Leu Cys Arg Lys Lys Val  
20 25 30  
Glu Asn Thr Arg Trp Asp Tyr Leu Thr Gln Val Glu Lys Glu Cys Lys

		35					40				45						
Glu	Lys	Glu	Lys	Pro	Ser	Tyr	Asp	Thr	Glu	Thr	Asp	Pro	Ser	Glu	Gly		
	50					55					60						
Leu	Met	Asn	Val	Leu	Lys	Lys	Ile	Tyr	Glu	Asp	Gly	Asp	Asp	Asp	Met		
65					70					75					80		
Lys	Arg	Thr	Ile	Asn	Lys	Ala	Trp	Val	Glu	Ser	Arg	Glu	Lys	Gln	Ala		
				85					90					95			
Lys	Gly	Asp	Thr														
			100														

<210> 4753  
 <211> 309  
 <212> PRT  
 <213> Homo sapiens

Met	Asn	Ser	Lys	Gly	Gln	Tyr	Pro	Thr	Gln	Pro	Thr	Tyr	Pro	Val	Gln		
1			5						10					15			
Pro	Pro	Gly	Asn	Pro	Val	Tyr	Pro	Gln	Thr	Leu	His	Leu	Pro	Gln	Ala		
			20					25					30				
Pro	Pro	Tyr	Thr	Asp	Ala	Pro	Pro	Ala	Tyr	Ser	Glu	Leu	Tyr	Arg	Pro		
		35				40					45						
Ser	Phe	Val	His	Pro	Gly	Ala	Ala	Thr	Val	Pro	Thr	Met	Ser	Ala	Ala		
	50				55						60						
Phe	Pro	Gly	Ala	Ser	Leu	Tyr	Leu	Pro	Met	Ala	Gln	Ser	Val	Ala	Val		
65					70				75						80		
Gly	Pro	Leu	Gly	Ser	Thr	Ile	Pro	Met	Ala	Tyr	Tyr	Pro	Val	Gly	Pro		
			85					90						95			
Ile	Tyr	Pro	Xaa	Gly	Ser	Thr											
			100														

<210> 4754  
 <211> 435  
 <212> PRT  
 <213> Homo sapiens

Met	Ala	Ser	Leu	Lys	Cys	Ser	Thr	Val	Val	Cys	Val	Ile	Cys	Leu	Glu		
1			5						10					15			
Lys	Pro	Lys	Tyr	Arg	Cys	Pro	Ala	Cys	Arg	Val	Pro	Tyr	Cys	Ser	Val		
			20					25					30				
Val	Cys	Phe	Arg	Lys	His	Lys	Glu	Gln	Cys	Asn	Pro	Glu	Thr	Arg	Pro		
		35				40					45						
Val	Glu	Lys	Lys	Ile	Arg	Ser	Ala	Leu	Pro	Thr	Lys	Thr	Val	Lys	Pro		
	50				55						60						
Val	Glu	Asn	Lys	Asp	Asp	Asp	Asp	Ser	Ile	Ala	Asp	Phe	Leu	Asn	Ser		
65					70				75						80		
Asp	Glu	Glu	Glu	Asp	Arg	Val	Ser	Leu	Gln	Asn	Leu	Lys	Asn	Leu	Asp		
			85					90						95			
Gly	Leu	Ser	Ser	Cys	His	Pro	Gly	Trp	Ser	Ala	Ala	Ala	Gln	Ser	Arg		
			100				105						110				
Leu	Thr	Ala	Thr	Ser	Pro	Ser	Gln	Ile	Xaa	Ala	Ile	Leu	Met	Pro	Gln		
		115					120					125					
Pro	Pro	Glu	Gln	Leu	Gly	Leu	Gln	Xaa	Pro	Ala	Thr	Thr	Pro	Asn	Gln		

130                      135                      140  
Phe  
145

<210> 4755  
<211> 294  
<212> PRT  
<213> Homo sapiens

<400> 4755  
Met Val Val Trp Glu Pro Ala Trp Gly Cys Lys Gly Pro Lys Ser Leu  
1                      5                      10                      15  
Ile Gly Val Arg Asn Glu Asn Thr Phe Leu Asp Leu Thr Val Gln Gln  
                    20                      25                      30  
Ile Glu His Leu Asn Lys Thr Tyr Asn Thr Asp Val Pro Leu Val Leu  
                    35                      40                      45  
Met Asn Ser Phe Asn Thr Asp Glu Asp Thr Lys Lys Ile Leu Gln Lys  
50                      55                      60  
Tyr Asn His Cys Arg Val Lys Ile Tyr Thr Phe Asn Gln Ser Arg Tyr  
65                      70                      75                      80  
Pro Arg Ile Asn Lys Glu Ser Leu Leu Pro Val Ala Lys Asp Val Ser  
                    85                      90                      95  
Tyr Ser

<210> 4756  
<211> 159  
<212> PRT  
<213> Homo sapiens

<400> 4756  
Met Lys Thr Asn Asp Thr Tyr Met Lys Phe Ser Trp Leu Thr Val Pro  
1                      5                      10                      15  
Glu Lys Ser Leu Asp Lys Glu His Arg Cys Ile Val Arg His Glu Asn  
                    20                      25                      30  
Asn Lys Asn Gly Val Asp Gln Glu Ile Ile Phe Pro Pro Ile Lys Thr  
35                      40                      45  
Asp Val Ile Thr Met  
50

<210> 4757  
<211> 201  
<212> PRT  
<213> Homo sapiens

<400> 4757  
Met Ala Val Arg Leu Leu Xaa Ser Leu Ile Lys Lys Ser Asn Gln Ser  
1                      5                      10                      15  
Ala Tyr Leu Arg Ser Gln Ser Arg Thr Ser Ser Asn Ser Phe Pro Pro  
                    20                      25                      30  
Val Ser His Leu Val Val Ala Leu His Leu Ser Gly Phe Tyr Cys Arg  
35                      40                      45  
Ile His Leu Ser Ser Ser Phe Ser Phe Gly Leu Asn Ser Lys Gln Ser  
50                      55                      60  
Pro Asp Ala

65

<210> 4758  
 <211> 255  
 <212> PRT  
 <213> Homo sapiens

<400> 4758  
 Met Gly Gln Gln Ser Ser Val Arg Arg Leu Lys Arg Ser Val Pro Cys  
 1 5 10 15  
 Glu Ser Asn Glu Ala Asn Glu Ala Asn Glu Ala Asn Lys Thr Met Pro  
 20 25 30  
 Glu Thr Pro Thr Gly Asp Ser Asp Pro Gln Pro Ala Pro Lys Lys Met  
 35 40 45  
 Lys Thr Ser Glu Ser Ser Thr Ile Leu Val Val Arg Tyr Arg Arg Asn  
 50 55 60  
 Val Lys Arg Thr Ser Pro Glu Glu Leu Val Asn Asp His Ala Arg Glu  
 65 70 75 80  
 Asn Arg Ile Asn Pro  
 85

<210> 4759  
 <211> 333  
 <212> PRT  
 <213> Homo sapiens

<400> 4759  
 Met Leu Cys Cys Met Arg Arg Thr Lys Gln Val Glu Lys Asn Asp Asp  
 1 5 10 15  
 Asp Gln Lys Ile Glu Gln Asp Gly Ile Lys Pro Glu Asp Lys Ala His  
 20 25 30  
 Lys Ala Ala Thr Lys Ile Gln Ala Ser Phe Arg Gly His Ile Thr Arg  
 35 40 45  
 Lys Lys Leu Lys Gly Glu Lys Lys Asp Asp Val Gln Ala Ala Glu Ala  
 50 55 60  
 Glu Ala Asn Lys Lys Asp Glu Ala Pro Val Ala Asp Gly Val Glu Lys  
 65 70 75 80  
 Lys Gly Glu Gly Thr Thr Ala Glu Ala Ala Pro Ala Xaa Gly Ser  
 85 90 95  
 Lys Pro Asp Glu Pro Gly Lys Ala Gly Lys Xaa Pro Ser Glu Glu  
 100 105 110

<210> 4760  
 <211> 285  
 <212> PRT  
 <213> Homo sapiens

<400> 4760  
 Met Glu Ala Glu Lys Asp Ser Gly Arg Arg Leu Arg Pro Ile Asp Arg  
 1 5 10 15  
 Gln Arg Tyr Asp Glu Xaa Glu Asp Leu Ser Asp Val Glu Glu Ile Val  
 20 25 30  
 Ser Val Arg Gly Phe Ser Leu Glu Glu Lys Leu Arg Ser Gln Leu Tyr  
 35 40 45

004220"666E560

Gln Gly Asp Phe Val His Ala Met Glu Gly Lys Asp Phe Asn Tyr Glu  
 50 55 60  
 Tyr Val Gln Arg Glu Ala Leu Arg Val Pro Leu Ile Phe Arg Glu Lys  
 65 70 75 80  
 Asp Gly Leu Gly Ile Lys Met Pro Asp Pro Asp Phe Thr Val Arg  
 85 90 95

<210> 4761  
 <211> 213  
 <212> PRT  
 <213> Homo sapiens

<400> 4761  
 Met Ala Pro Ser Arg Asn Gly Met Val Leu Lys Pro His Gly Ser Val  
 1 5 10 15  
 Pro His Glu Gly Ala Arg Arg Pro Arg Leu Xaa Pro Gly Gly Ala Gln  
 20 25 30  
 Gly Gly Arg His Ser Gln Glu Gly Gly Pro Asp His Arg His Phe Cys  
 35 40 45  
 Gly Ser Glu Glu Ala Glu Gln Val His Gly Val Pro Ala Gly Gln Arg  
 50 55 60  
 Ala Ala Ala Glu Gly Val Pro  
 65 70

<210> 4762  
 <211> 360  
 <212> PRT  
 <213> Homo sapiens

<400> 4762  
 Met Ala Pro Ser Arg Asn Gly Met Val Leu Lys Pro His Phe His Lys  
 1 5 10 15  
 Asp Trp Gln Arg Arg Val Ala Thr Trp Phe Asn Gln Pro Ala Arg Lys  
 20 25 30  
 Ile Arg Arg Arg Lys Ala Arg Gln Ala Lys Ala Arg Arg Ile Ala Pro  
 35 40 45  
 Arg Pro Ala Ser Gly Pro Ile Arg Pro Ile Val Arg Cys Pro Thr Val  
 50 55 60  
 Arg Tyr His Thr Lys Val Arg Ala Gly Arg Gly Phe Ser Leu Glu Glu  
 65 70 75 80  
 Leu Arg Val Ala Gly Ile His Lys Lys Val Ala Arg Thr Ile Gly Ile  
 85 90 95  
 Ser Val Asp Pro Arg Arg Arg Asn Lys Ser Thr Glu Ser Leu Gln Ala  
 100 105 110  
 Asn Val Gln Arg Leu Lys Glu Tyr  
 115 120

<210> 4763  
 <211> 360  
 <212> PRT  
 <213> Homo sapiens

<400> 4763  
 Met Ala Pro Ser Arg Asn Gly Met Val Leu Lys Pro His Phe His Lys

1                    5                    10                    15  
 Asp Trp Gln Arg Arg Val Ala Thr Trp Phe Asn Gln Pro Ala Arg Lys  
                   20                    25                    30  
 Ile Arg Arg Arg Lys Ala Arg Gln Ala Lys Ala Arg Arg Ile Ala Pro  
                   35                    40                    45  
 Arg Pro Ala Ser Gly Pro Ile Arg Pro Ile Val Arg Cys Pro Thr Val  
                   50                    55                    60  
 Arg Tyr His Thr Lys Val Arg Ala Gly Arg Gly Phe Ser Leu Glu Glu  
 65                    70                    75                    80  
 Leu Arg Val Ala Gly Ile His Lys Lys Val Ala Arg Thr Ile Gly Ile  
                   85                    90                    95  
 Ser Val Asp Pro Arg Arg Arg Asn Lys Ser Thr Glu Ser Leu Gln Ala  
                   100                    105                    110  
 Asn Val Gln Arg Leu Lys Glu Tyr  
                   115                    120

<210> 4764  
 <211> 243  
 <212> PRT  
 <213> Homo sapiens

<400> 4764  
 Met Asp Glu Glu Pro Glu Arg Thr Lys Arg Trp Glu Gly Gly Tyr Glu  
 1                    5                    10                    15  
 Arg Thr Trp Glu Ile Leu Lys Glu Asp Glu Ser Gly Ser Leu Lys Ala  
                   20                    25                    30  
 Thr Ile Glu Asp Ile Leu Phe Lys Ala Lys Arg Lys Arg Val Phe Glu  
                   35                    40                    45  
 His His Gly Gln Val Arg Leu Gly Met Met Arg His Leu Tyr Val Val  
                   50                    55                    60  
 Val Asp Gly Ser Arg Thr Met Glu Asp Gln Asp Leu Lys Pro Asn Arg  
 65                    70                    75                    80  
 Leu

<210> 4765  
 <211> 300  
 <212> PRT  
 <213> Homo sapiens

<400> 4765  
 Met Arg Glu Ile Val His Leu Gln Ala Gly Gln Cys Gly Asn Gln Ile  
 1                    5                    10                    15  
 Gly Ala Lys Phe Trp Glu Val Ile Ser Asp Glu His Gly Ile Asp Pro  
                   20                    25                    30  
 Thr Gly Thr Tyr His Gly Asp Ser Asp Leu Gln Leu Glu Arg Ile Asn  
                   35                    40                    45  
 Val Tyr Tyr Asn Glu Ala Thr Gly Gly Lys Tyr Val Pro Arg Ala Val  
                   50                    55                    60  
 Leu Val Asp Leu Glu Pro Gly Thr Met Asp Ser Val Arg Ser Gly Pro  
 65                    70                    75                    80  
 Phe Gly Gln Ile Phe Arg Pro Asp Asn Phe Val Phe Gly Gln Ser Gly  
                   85                    90                    95  
 Ala Gly Asn Asn  
                   100

<210> 4766  
 <211> 192  
 <212> PRT  
 <213> Homo sapiens

<400> 4766  
 Met Ser Met Gly Leu Thr Pro Leu Ala Val Thr Met Glu Thr Val Ile  
 1 5 10 15  
 Cys Ser Trp Arg Glu Ser Met Phe Tyr Asn Glu Ala Thr Gly Asn  
 20 25 30  
 Lys Tyr Val Pro Arg Ala Asn Pro Gln Trp Ile Trp Lys Pro Gly Thr  
 35 40 45  
 Met Asp Xaa Val Xaa Ser Gly Pro Phe Gly Xaa Xaa Phe Arg Pro Arg  
 50 55 60

<210> 4767  
 <211> 333  
 <212> PRT  
 <213> Homo sapiens

<400> 4767  
 Met Arg Glu Ile Val His Ile Gln Ala Gly Gln Cys Gly Asn Gln Ile  
 1 5 10 15  
 Gly Ala Lys Phe Trp Glu Val Ile Ser Asp Glu His Gly Ile Asp Pro  
 20 25 30  
 Thr Gly Thr Tyr His Gly Asp Ser Asp Leu Gln Leu Asp Arg Ile Ser  
 35 40 45  
 Val Tyr Tyr Asn Glu Ala Thr Gly Gly Lys Tyr Val Pro Arg Ala Ile  
 50 55 60  
 Leu Val Asp Leu Glu Pro Gly Thr Met Asp Ser Val Arg Ser Gly Pro  
 65 70 75 80  
 Phe Gly Gln Ile Phe Arg Pro Asp Asn Phe Val Phe Gly Gln Ser Gly  
 85 90 95  
 Ala Gly Asn Asn Trp Ala Lys Gly Thr Thr Gln Arg Ala Arg Ala  
 100 105 110

<210> 4768  
 <211> 300  
 <212> PRT  
 <213> Homo sapiens

<400> 4768  
 Met Asn Ala Arg Gly Leu Gly Ser Glu Leu Lys Asp Ser Ile Pro Val  
 1 5 10 15  
 Thr Glu Leu Ser Ala Ser Gly Pro Phe Glu Ser His Asp Leu Leu Arg  
 20 25 30  
 Lys Gly Phe Ser Cys Val Lys Asn Glu Leu Leu Pro Ser His Pro Leu  
 35 40 45  
 Glu Leu Ser Glu Lys Asn Phe Gln Leu Asn Gln Asp Lys Met Asn Phe  
 50 55 60  
 Ser Thr Leu Arg Asn Ile Gln Gly Leu Phe Ala Pro Leu Lys Leu Gln  
 65 70 75 80  
 Met Xaa Phe Lys Ala Val Gln Gln Thr Gly Leu Gly Pro Ala Glu His

**SECRET**

[illegible]

<400> 4770															
Met	Ser	Phe	Ile	Leu	Ile	Asn	Xaa	Pro	Val	Phe	Leu	Phe	Leu	Phe	Ile
1				5					10					15	
Tyr	Phe	Glu	Thr	Gly	Ser	His	Phe	Val	Thr	Gln	Ala	Gly	Gly	Lys	Trp
			20					25					30		
Arg	Gly	Leu	Gly	Ser	Leu	Gln	Pro	Leu	Pro	Pro	Gly	Phe	Arg	Arg	Ser
		35					40					45			
Ser	Cys	Leu	Ser	Leu	Leu	Ser	Gly	Trp	Asp	Cys	Gly	Leu	Ala	Pro	Pro
	50					55					60				
Arg	Ser	Ala	Asn	Phe	Cys	Ile	Phe	Ser	Gly	Asp	Gly	Val	Ser	Pro	Cys
65				70						75				80	
Trp	Xaa	Asp	Trp	Ser	Ser	Thr	Pro	Gly	Phe	Arg	Trp	Ser	Xaa	Leu	Leu
				85					90					95	
Gly															

2896



&lt;400&gt; 4771

Met Ser Asn Met Glu Lys His Leu Phe Asn Leu Lys Phe Ala Ala Lys  
 1 5 10 15  
 Glu Leu Ser Arg Ser Ala Lys Lys Cys Asp Lys Glu Glu Lys Ala Glu  
 20 25 30  
 Lys Ala Lys Ile Lys Lys Ala Ile Gln Lys Gly Asn Met Glu Val Ala  
 35 40 45  
 Arg Ile Xaa Ala  
 50

&lt;210&gt; 4772

&lt;211&gt; 417

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4772

Met Asp Gly Ser Arg Lys Glu Glu Glu Glu Asp Ser Thr Phe Thr Asn  
 1 5 10 15  
 Ile Ser Leu Ala Asp Asp Ile Xaa His Ser Ser Arg Ile Leu Tyr Pro  
 20 25 30  
 Arg Pro Lys Ser Leu Leu Pro Lys Met Met Asn Ala Asp Met Asp Ala  
 35 40 45  
 Val Asp Xaa Glu Asn Gln Val Glu Leu Glu Glu Lys Thr Arg Leu Ile  
 50 55 60  
 Asn Gln Val Leu Glu Leu Gln His Thr Leu Glu Asp Leu Ser Ala Arg  
 65 70 75 80  
 Val Asp Ala Val Lys Glu Glu Asn Leu Lys Leu Lys Ser Glu Asn Gln  
 85 90 95  
 Val Leu Gly Gln Tyr Ile Glu Asn Leu Met Ser Ala Ser Ser Val Phe  
 100 105 110  
 Gln Thr Thr Asp Thr Lys Ser Lys Arg Ser Lys Gly Leu Thr Pro Phe  
 115 120 125  
 Cys Phe Met Glu Leu Leu Leu Ile Ile Phe Ser  
 130 135

&lt;210&gt; 4773

&lt;211&gt; 357

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4773

Met Ser Ala Gln Phe Arg Ser Leu His Gln Tyr Ala Ala Gln Arg Ile  
 1 5 10 15  
 Ile Ser Leu Phe Ser Leu Leu Ser Lys Lys His Asn Lys Val Leu Glu  
 20 25 30  
 Gln Ala Thr Xaa Xaa Leu Xaa Gly Ser Leu Ser Ser Asn Asp Val Pro  
 35 40 45  
 Leu Pro Asp Tyr Ala Gln Asp Leu Asn Val Ile Glu Glu Val Ile Arg  
 50 55 60  
 Met Met Leu Glu Ile Ile Asn Ser Cys Leu Thr Asn Ser Leu His His  
 65 70 75 80  
 Asn Pro Asn Leu Val Tyr Ala Leu Leu Tyr Lys Arg Asp Leu Phe Glu  
 85 90 95  
 Gln Phe Arg Thr His Pro Ser Phe Gln Asp Ile Met Gln Asn Ile Asp

004220"666E560

100  
Leu Val Ile Ser Phe Phe Ser  
115

105

110

<210> 4774  
<211> 336  
<212> PRT  
<213> Homo sapiens

<400> 4774  
Met Gln Arg Glu Glu Lys Gln Leu Glu Ala Ser Leu Asp Ala Leu Leu  
1 5 10 15  
Ser Gln Val Ala Asp Leu Lys Asn Ser Leu Gly Ser Phe Ile Cys Lys  
20 25 30  
Leu Glu Xaa Glu Tyr Gly Arg Leu Thr Trp Pro Ser Val Leu Asp Ser  
35 40 45  
Phe Ala Leu Leu Ser Gly Gln Leu Asn Thr Leu Asn Lys Val Leu Lys  
50 55 60  
His Glu Lys Thr Pro Leu Phe Arg Asn Gln Val Ile Ile Pro Leu Val  
65 70 75 80  
Leu Ser Pro Asp Arg Asp Glu Asp Leu Met Arg Gln Thr Glu Gly Arg  
85 90 95  
Val Pro Val Phe Ser His Glu Val Val Pro Asp His Leu Arg Thr Lys  
100 105 110

<210> 4775  
<211> 216  
<212> PRT  
<213> Homo sapiens

<400> 4775  
Met Gly Pro Asp Tyr Arg Val Leu Val His Arg Ala Arg Lys Leu Ala  
1 5 10 15  
Gln Gln Tyr Tyr Leu Val Tyr Gln Glu Pro Ile Pro Thr Ala Gln Leu  
20 25 30  
Val Gln Arg Val Ala Ser Val Met Gln Glu Tyr Thr Gln Ser Gly Gly  
35 40 45  
Val Arg Pro Phe Gly Val Ser Leu Leu Ile Cys Gly Trp Asn Glu Gly  
50 55 60  
Arg Pro Tyr Leu Phe Gln Ser Asp  
65 70

<210> 4776  
<211> 210  
<212> PRT  
<213> Homo sapiens

<400> 4776  
Met Ser Ser Arg Lys Gln Gly Ser Gln Pro Arg Gly Gln Gln Ser Ala  
1 5 10 15  
Glu Glu Glu Asn Phe Lys Lys Pro Thr Arg Ser Asn Met Gln Arg Ser  
20 25 30  
Lys Met Arg Gly Ala Ser Ser Gly Lys Lys Thr Ala Gly Pro Gln Gln  
35 40 45

004220" 666E363

Lys Asn Leu Glu Pro Ala Leu Pro Gly Arg Trp Gly Gly Arg Ser Ala  
50 55 60  
Glu Asn Pro Pro Ser Gly  
65 70

<210> 4777  
<211> 210  
<212> PRT  
<213> Homo sapiens

<400> 4777  
Met Ser Ser Arg Lys Gln Gly Ser Gln Pro Arg Gly Gln Gln Ser Ala  
1 5 10 15  
Glu Glu Glu Asn Phe Lys Lys Pro Thr Arg Ser Asn Met Gln Arg Ser  
20 25 30  
Lys Met Arg Gly Ala Ser Ser Gly Lys Lys Thr Ala Gly Pro Gln Gln  
35 40 45  
Lys Asn Leu Glu Pro Ala Leu Pro Gly Arg Trp Gly Gly Arg Ser Ala  
50 55 60  
Glu Asn Pro Pro Ser Gly  
65 70

<210> 4778  
<211> 210  
<212> PRT  
<213> Homo sapiens

<400> 4778  
Met Ser Ser Arg Lys Gln Gly Ser Gln Pro Arg Gly Gln Gln Ser Ala  
1 5 10 15  
Glu Glu Glu Asn Phe Lys Lys Pro Thr Arg Ser Asn Met Gln Arg Ser  
20 25 30  
Lys Met Arg Gly Ala Ser Ser Gly Lys Lys Thr Ala Gly Pro Gln Gln  
35 40 45  
Lys Asn Leu Glu Pro Ala Leu Pro Gly Arg Trp Gly Gly Arg Ser Ala  
50 55 60  
Glu Asn Pro Pro Ser Gly  
65 70

<210> 4779  
<211> 210  
<212> PRT  
<213> Homo sapiens

<400> 4779  
Met Ser Ser Arg Lys Gln Gly Ser Gln Pro Arg Gly Gln Gln Ser Ala  
1 5 10 15  
Glu Glu Glu Asn Phe Lys Lys Pro Thr Arg Ser Asn Met Gln Arg Ser  
20 25 30  
Lys Met Arg Gly Ala Ser Ser Gly Lys Lys Thr Ala Gly Pro Gln Gln  
35 40 45  
Lys Asn Leu Glu Pro Ala Leu Pro Gly Arg Trp Gly Gly Arg Ser Ala  
50 55 60  
Glu Asn Pro Pro Ser Gly

65

70

&lt;210&gt; 4780

&lt;211&gt; 210

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4780

Met	Ser	Ser	Arg	Lys	Gln	Gly	Ser	Gln	Pro	Arg	Gly	Gln	Gln	Ser	Ala
1				5					10					15	
Glu	Glu	Glu	Asn	Phe	Lys	Lys	Pro	Thr	Arg	Ser	Asn	Met	Gln	Arg	Ser
			20					25					30		
Lys	Met	Arg	Gly	Ala	Ser	Ser	Gly	Lys	Lys	Thr	Ala	Gly	Pro	Gln	Gln
		35					40					45			
Lys	Asn	Leu	Glu	Pro	Ala	Leu	Pro	Gly	Arg	Trp	Gly	Gly	Arg	Ser	Ala
	50					55					60				
Glu	Asn	Pro	Pro	Ser	Gly										
65					70										

&lt;210&gt; 4781

&lt;211&gt; 351

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4781

Met	Ala	Leu	Thr	Ser	Thr	Asp	His	Asn	Thr	Lys	Pro	Thr	Met	Ile	Arg
1				5					10					15	
Arg	Pro	Pro	Ala	Val	Val	Cys	Tyr	Ile	Cys	Gly	Arg	Glu	Tyr	Gly	Thr
			20					25					30		
Lys	Ser	Ile	Ser	Ile	His	Glu	Pro	Gln	Cys	Leu	Lys	Lys	Trp	His	Asn
		35					40					45			
Glu	Asn	Asn	Leu	Leu	Pro	Lys	Glu	Leu	Arg	Arg	Pro	Val	Pro	Lys	Lys
	50					55				60					
Pro	Glu	Val	Arg	Thr	Ile	Thr	Ala	Lys	Gly	Phe	Tyr	Asp	Leu	Asp	Ala
65					70				75					80	
Leu	Asn	Glu	Ala	Ala	Trp	Thr	Ser	Ala	His	Ser	Gln	Leu	Val	Pro	Cys
			85					90					95		
Asn	Val	Cys	Gly	Arg	Thr	Phe	Leu	Pro	Asp	Arg	Leu	Ile	Val	His	Gln
		100						105					110		
Gln	Ser	Cys	Lys	Pro											
		115													

&lt;210&gt; 4782

&lt;211&gt; 273

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4782

Met	Gly	Phe	Leu	Lys	Leu	Ile	Glu	Ile	Glu	Asn	Phe	Lys	Ser	Tyr	Lys
1				5					10					15	
Gly	Arg	Gln	Ile	Ile	Gly	Pro	Phe	Gln	Arg	Phe	Thr	Ala	Ile	Ile	Gly
		20						25					30		
Pro	Asn	Gly	Ser	Gly	Lys	Ser	Asn	Leu	Met	Asp	Ala	Ile	Ser	Phe	Val
		35					40					45			

Leu Gly Glu Lys Thr Ser Asn Leu Arg Val Lys Thr Leu Arg Asp Leu  
 50 55 60  
 Ile His Gly Ala Pro Val Gly Lys Pro Ala Ala Asn Arg Ala Phe Val  
 65 70 75 80  
 Ser Met Val Tyr Ser Glu Glu Gly Ala Glu Asp  
 85 90

<210> 4783  
 <211> 174  
 <212> PRT  
 <213> Homo sapiens

<400> 4783  
 Met Ala Gly Glu Lys Val Glu Lys Pro Asp Thr Lys Glu Lys Lys Pro  
 1 5 10 15  
 Glu Ala Lys Lys Val Asp Ala Gly Gly Lys Val Lys Lys Gly Asn Leu  
 20 25 30  
 Lys Ala Lys Lys Pro Lys Lys Gly Lys Pro Leu Xaa Phe Met Asp Asp  
 35 40 45  
 Ser Xaa Val Glu Ser Thr Ala Ser Ile Leu  
 50 55

<210> 4784  
 <211> 288  
 <212> PRT  
 <213> Homo sapiens

<400> 4784  
 Met Ala Gly Glu Lys Val Glu Lys Pro Asp Thr Lys Glu Lys Lys Pro  
 1 5 10 15  
 Glu Ala Lys Lys Val Asp Ala Gly Gly Lys Val Lys Lys Gly Asn Leu  
 20 25 30  
 Lys Ala Lys Lys Pro Lys Lys Gly Lys Pro His Cys Ser Arg Asn Pro  
 35 40 45  
 Val Leu Val Arg Gly Ile Gly Arg Tyr Ser Arg Ser Ala Met Tyr Ser  
 50 55 60  
 Arg Lys Ala Met Lys Glu Lys Asp Arg Glu Lys Glu Arg Glu Arg Xaa  
 65 70 75 80  
 Lys Xaa Arg Glu Lys Glu Lys Xaa Arg Gly Lys Asn Xaa Xaa Arg Asp  
 85 90 95

<210> 4785  
 <211> 288  
 <212> PRT  
 <213> Homo sapiens

<400> 4785  
 Met Ala Gly Glu Lys Val Glu Lys Pro Asp Thr Lys Glu Lys Lys Pro  
 1 5 10 15  
 Glu Ala Lys Lys Val Asp Ala Gly Gly Lys Val Lys Lys Gly Asn Leu  
 20 25 30  
 Lys Ala Lys Lys Pro Lys Lys Gly Lys Pro His Cys Ser Arg Asn Pro  
 35 40 45  
 Val Leu Val Arg Gly Ile Gly Arg Tyr Ser Arg Ser Ala Met Tyr Ser

50		55		60
Arg Lys Ala Met Tyr Lys Arg Lys Gln Leu Leu Lys Pro Arg Xaa Arg				
65		70		80
Lys Trp Lys Ala Gln Asn Arg Leu Arg Leu Ser Ile Ser Leu Leu Glu				
	85		90	95

<210> 4786  
 <211> 174  
 <212> PRT  
 <213> Homo sapiens

<400> 4786
Met Ala Gly Glu Lys Val Glu Lys Pro Asp Thr Lys Glu Lys Lys Pro
1 5 10 15
Glu Ala Lys Lys Val Asp Ala Gly Gly Lys Val Lys Lys Gly Asn Leu
20 25 30
Lys Ala Lys Lys Pro Lys Lys Gly Lys Pro Leu Xaa Phe Met Asp Asp
35 40 45
Ser Xaa Val Glu Ser Thr Ala Ser Ile Leu
50 55

<210> 4787  
 <211> 174  
 <212> PRT  
 <213> Homo sapiens

<400> 4787
Met Ala Gly Glu Lys Val Glu Lys Pro Asp Thr Lys Glu Lys Lys Pro
1 5 10 15
Glu Ala Lys Lys Val Asp Ala Gly Gly Lys Val Lys Lys Gly Asn Leu
20 25 30
Lys Ala Lys Lys Pro Lys Lys Gly Lys Pro Leu Xaa Phe Met Asp Asp
35 40 45
Ser Xaa Val Glu Ser Thr Ala Ser Ile Leu
50 55

<210> 4788  
 <211> 288  
 <212> PRT  
 <213> Homo sapiens

<400> 4788
Met Ala Gly Glu Lys Val Glu Lys Pro Asp Thr Lys Glu Lys Lys Pro
1 5 10 15
Glu Ala Lys Lys Val Asp Ala Gly Gly Lys Val Lys Lys Gly Asn Leu
20 25 30
Lys Ala Lys Lys Pro Lys Lys Gly Lys Pro His Cys Ser Arg Asn Pro
35 40 45
Val Leu Val Arg Gly Ile Gly Arg Tyr Ser Arg Ser Ala Met Tyr Ser
50 55 60
Arg Lys Ala Met Lys Glu Lys Asp Arg Glu Lys Glu Arg Glu Arg Xaa
65 70 75 80
Lys Xaa Arg Glu Lys Glu Lys Xaa Arg Gly Lys Asn Xaa Xaa Arg Asp
85 90 95

<210> 4789  
 <211> 288  
 <212> PRT  
 <213> Homo sapiens

<400> 4789  
 Met Ala Gly Glu Lys Val Glu Lys Pro Asp Thr Lys Glu Lys Lys Pro  
 1 5 10 15  
 Glu Ala Lys Lys Val Asp Ala Gly Gly Lys Val Lys Lys Gly Asn Leu  
 20 25 30  
 Lys Ala Lys Lys Pro Lys Lys Gly Lys Pro His Cys Ser Arg Asn Pro  
 35 40 45  
 Val Leu Val Arg Gly Ile Gly Arg Tyr Ser Arg Ser Ala Met Tyr Ser  
 50 55 60  
 Arg Lys Ala Met Tyr Lys Arg Lys Gln Leu Leu Lys Pro Arg Xaa Arg  
 65 70 75 80  
 Lys Trp Lys Ala Gln Asn Arg Leu Arg Leu Ser Ile Ser Leu Leu Glu  
 85 90 95

<210> 4790  
 <211> 669  
 <212> PRT  
 <213> Homo sapiens

<400> 4790  
 Met Ala Gly Glu Lys Val Glu Lys Pro Asp Thr Lys Glu Lys Lys Pro  
 1 5 10 15  
 Glu Ala Lys Lys Val Asp Ala Gly Gly Lys Val Lys Lys Gly Asn Leu  
 20 25 30  
 Lys Ala Lys Lys Pro Lys Lys Gly Lys Pro His Cys Ser Arg Asn Pro  
 35 40 45  
 Val Leu Val Arg Gly Ile Gly Arg Tyr Ser Arg Ser Ala Met Tyr Ser  
 50 55 60  
 Arg Lys Ala Met Tyr Lys Arg Lys Tyr Ser Ala Ala Lys Ser Lys Val  
 65 70 75 80  
 Glu Lys Lys Lys Lys Glu Lys Val Leu Ala Thr Val Thr Lys Pro Val  
 85 90 95  
 Gly Gly Asp Lys Asn Gly Gly Thr Arg Val Val Lys Leu Arg Lys Met  
 100 105 110  
 Pro Arg Tyr Tyr Pro Thr Glu Asp Val Pro Arg Lys Leu Leu Ser His  
 115 120 125  
 Gly Lys Lys Pro Phe Ser Gln His Val Arg Lys Leu Arg Ala Ser Ile  
 130 135 140  
 Thr Pro Gly Thr Ile Leu Ile Ile Leu Thr Gly Arg His Arg Gly Lys  
 145 150 155 160  
 Arg Val Val Phe Leu Lys Gln Leu Ala Ser Gly Leu Leu Leu Val Thr  
 165 170 175  
 Gly Pro Leu Val Leu Asn Arg Val Pro Leu Arg Arg Thr His Gln Lys  
 180 185 190  
 Phe Val Ile Ala Thr Ser Thr Lys Ile Asp Ile Ser Asn Val Lys Ile  
 195 200 205  
 Pro Lys His Leu Thr Asp Ala Tyr Phe Lys Lys Lys Lys Leu Arg  
 210 215 220

<210> 4791  
 <211> 288  
 <212> PRT  
 <213> Homo sapiens

<400> 4791  
 Met Ala Gly Glu Lys Val Glu Lys Pro Asp Thr Lys Glu Lys Lys Pro  
 1 5 10 15  
 Glu Ala Lys Lys Val Asp Ala Gly Gly Lys Val Lys Lys Gly Asn Leu  
 20 25 30  
 Lys Ala Lys Lys Pro Lys Lys Gly Lys Pro His Cys Ser Arg Asn Pro  
 35 40 45  
 Val Leu Val Arg Gly Ile Gly Arg Tyr Ser Arg Ser Ala Met Tyr Ser  
 50 55 60  
 Arg Lys Ala Met Lys Glu Lys Asp Arg Glu Lys Glu Arg Glu Arg Xaa  
 65 70 75 80  
 Lys Xaa Arg Glu Lys Glu Lys Xaa Arg Gly Lys Asn Xaa Xaa Arg Asp  
 85 90 95

<210> 4792  
 <211> 288  
 <212> PRT  
 <213> Homo sapiens

<400> 4792  
 Met Ala Gly Glu Lys Val Glu Lys Pro Asp Thr Lys Glu Lys Lys Pro  
 1 5 10 15  
 Glu Ala Lys Lys Val Asp Ala Gly Gly Lys Val Lys Lys Gly Asn Leu  
 20 25 30  
 Lys Ala Lys Lys Pro Lys Lys Gly Lys Pro His Cys Ser Arg Asn Pro  
 35 40 45  
 Val Leu Val Arg Gly Ile Gly Arg Tyr Ser Arg Ser Ala Met Tyr Ser  
 50 55 60  
 Arg Lys Ala Met Tyr Lys Arg Lys Gln Leu Leu Lys Pro Arg Xaa Arg  
 65 70 75 80  
 Lys Trp Lys Ala Gln Asn Arg Leu Arg Leu Ser Ile Ser Leu Leu Glu  
 85 90 95

<210> 4793  
 <211> 669  
 <212> PRT  
 <213> Homo sapiens

<400> 4793  
 Met Ala Gly Glu Lys Val Glu Lys Pro Asp Thr Lys Glu Lys Lys Pro  
 1 5 10 15  
 Glu Ala Lys Lys Val Asp Ala Gly Gly Lys Val Lys Lys Gly Asn Leu  
 20 25 30  
 Lys Ala Lys Lys Pro Lys Lys Gly Lys Pro His Cys Ser Arg Asn Pro  
 35 40 45  
 Val Leu Val Arg Gly Ile Gly Arg Tyr Ser Arg Ser Ala Met Tyr Ser  
 50 55 60  
 Arg Lys Ala Met Tyr Lys Arg Lys Tyr Ser Ala Ala Lys Ser Lys Val

004220" 666ET560





85 90 95  
 Thr Leu Leu Lys Gln Leu Arg Lys Glu Gln  
 100 105

<210> 4796  
 <211> 339  
 <212> PRT  
 <213> Homo sapiens

<400> 4796  
 Met Pro Glu Cys Trp Asp Gly Glu His Asp Ile Glu Thr Pro Tyr Gly  
 1 5 10 15  
 Leu Leu His Val Val Ile Arg Gly Ser Pro Lys Gly Asn Arg Pro Ala  
 20 25 30  
 Ile Leu Thr Tyr His Asp Val Gly Leu Asn His Lys Leu Cys Phe Asn  
 35 40 45  
 Thr Phe Phe Asn Phe Glu Asp Met Gln Glu Ile Thr Lys His Phe Val  
 50 55 60  
 Val Cys His Val Xaa Xaa Pro Gly Gln Gln Val Gly Ala Ser Gln Phe  
 65 70 75 80  
 Pro Gln Gly Tyr Gln Phe Pro Ser Met Glu Gln Leu Ala Ala Met Leu  
 85 90 95  
 Pro Ser Val Val Gln His Phe Gly Phe Lys Tyr Val Ile Gly Ile Gly  
 100 105 110  
 Val

<210> 4797  
 <211> 261  
 <212> PRT  
 <213> Homo sapiens

<400> 4797  
 Met Ser Arg Glu Met Gln Asp Val Asp Leu Ala Glu Val Lys Pro Leu  
 1 5 10 15  
 Val Glu Lys Gly Glu Thr Ile Thr Gly Leu Leu Gln Glu Phe Asp Val  
 20 25 30  
 Gln Glu Gln Asp Ile Glu Thr Leu His Gly Ser Val His Val Thr Leu  
 35 40 45  
 Cys Gly Thr Pro Lys Gly Asn Arg Pro Val Ile Leu Thr Tyr His Asp  
 50 55 60  
 Ile Gly Met Asn His Lys Thr Cys Tyr Asn Pro Leu Phe Asn Tyr Glu  
 65 70 75 80  
 Asp Met Gln Glu Ile Thr Gln  
 85

<210> 4798  
 <211> 309  
 <212> PRT  
 <213> Homo sapiens

<400> 4798  
 Met Ser Lys Arg Gly Arg Gly Gly Ser Ser Gly Ala Lys Phe Arg Ile  
 1 5 10 15  
 Ser Leu Gly Leu Pro Val Gly Ala Val Ile Asn Cys Ala Asp Asn Thr

20 25 30  
 Gly Ala Lys Asn Leu Tyr Ile Ile Ser Val Lys Xaa Ile Lys Gly Arg  
 35 40 45  
 Leu Asn Arg Leu Pro Ala Ala Gly Val Gly Asp Met Val Met Ala Thr  
 50 55 60  
 Val Lys Lys Gly Lys Pro Glu Leu Arg Lys Lys Val His Pro Ala Val  
 65 70 75 80  
 Val Ile Arg Gln Arg Lys Ser Tyr Arg Arg Lys Asp Gly Ala Leu Ala  
 85 90 95  
 Ser Gln Ser Val Trp Ile Thr  
 100

<210> 4799  
 <211> 162  
 <212> PRT  
 <213> Homo sapiens

<400> 4799  
 Met Ala Val Gly Lys Asn Lys Arg Leu Thr Lys Gly Gly Lys Lys Gly  
 1 5 10 15  
 Ala Lys Lys Lys Val Val Asp Pro Phe Ser Lys Lys Asp Trp Tyr Asp  
 20 25 30  
 Val Lys Ala Pro Ala Met Phe Asn Ile Arg Asn Ile Gly His Ser Arg  
 35 40 45  
 Cys Phe Gln Pro Phe His  
 50

<210> 4800  
 <211> 774  
 <212> PRT  
 <213> Homo sapiens

<400> 4800  
 Met Ala Val Gly Lys Asn Lys Arg Leu Thr Lys Gly Gly Lys Lys Gly  
 1 5 10 15  
 Ala Lys Lys Lys Val Val Asp Pro Phe Ser Lys Lys Asp Trp Tyr Asp  
 20 25 30  
 Val Lys Ala Pro Ala Met Phe Asn Ile Arg Asn Ile Gly Lys Thr Leu  
 35 40 45  
 Val Thr Arg Thr Gln Gly Thr Lys Ile Ala Ser Asp Gly Leu Lys Gly  
 50 55 60  
 Arg Val Phe Glu Val Ser Leu Ala Asp Leu Gln Asn Asp Glu Val Ala  
 65 70 75 80  
 Phe Arg Lys Phe Lys Leu Ile Thr Glu Asp Val Gln Gly Lys Asn Cys  
 85 90 95  
 Leu Thr Asn Phe His Gly Met Asp Leu Thr Arg Asp Lys Met Cys Ser  
 100 105 110  
 Met Val Lys Lys Trp Gln Thr Met Ile Glu Ala His Val Asp Val Lys  
 115 120 125  
 Thr Thr Asp Gly Tyr Leu Leu Arg Leu Phe Cys Val Gly Phe Thr Lys  
 130 135 140  
 Lys Arg Asn Asn Gln Ile Arg Lys Thr Ser Tyr Ala Gln His Gln Gln  
 145 150 155 160  
 Val Arg Gln Ile Arg Lys Lys Met Met Glu Ile Met Thr Arg Glu Val



130

135

<210> 4803  
 <211> 243  
 <212> PRT  
 <213> Homo sapiens

<400> 4803

Met	Asn	Asn	Lys	Phe	Asp	Ala	Leu	Lys	Asp	Asp	Asp	Ser	Gly	Asp	His
1				5					10					15	
Asp	Gln	Asn	Glu	Glu	Asn	Ser	Thr	Gln	Lys	Asp	Gly	Glu	Lys	Glu	Lys
		20						25					30		
Thr	Glu	Arg	Asp	Lys	Asn	Gln	Ser	Ser	Ser	Lys	Arg	Lys	Val	Glu	Gln
		35					40					45			
Phe	Trp	Arg	Phe	Tyr	Ser	His	Met	Val	Arg	Pro	Gly	Asp	Leu	Thr	Gly
	50					55					60				
His	Ser	Asp	Phe	His	Leu	Phe	Lys	Glu	Gly	Ile	Lys	Pro	Met	Trp	Glu
65					70					75					80
Asp															

<210> 4804  
 <211> 189  
 <212> PRT  
 <213> Homo sapiens

<400> 4804

Met	Lys	Arg	Lys	Lys	Arg	Gln	Phe	Leu	Lys	Leu	Ser	Gln	Asn	Ile	Asn
1				5					10					15	
Arg	Trp	Lys	Asp	Val	Pro	Met	Ser	Ser	Pro	Pro	Ser	Thr	Leu	Gly	Ala
		20						25					30		
Trp	Lys	Cys	Cys	Ser	Arg	Glu	Gln	Ala	Pro	Gly	Trp	Thr	Cys	Pro	Val
		35					40					45			
Leu	Thr	Thr	Ser	Val	Cys	Xaa	Val	Asn	Asn	Lys	Ser	Phe	Gln	Arg	
50						55					60				

<210> 4805  
 <211> 282  
 <212> PRT  
 <213> Homo sapiens

<400> 4805

Met	Gln	His	Ala	Arg	Lys	Ala	Gly	Leu	Val	Ile	Pro	Pro	Glu	Lys	Ser
1				5					10					15	
Asp	Arg	Ser	Ile	His	Leu	Ala	Cys	Thr	Ala	Gly	Ile	Phe	Asp	Ala	Tyr
		20						25					30		
Val	Pro	Pro	Glu	Gly	Asp	Ala	Arg	Ile	Ser	Ser	Leu	Ser	Lys	Glu	Gly
		35					40					45			
Leu	Ile	Glu	Arg	Thr	Glu	Arg	Met	Lys	Lys	Thr	Met	Ala	Ser	Gln	Val
	50					55					60				
Ser	Ile	Arg	Arg	Ile	Lys	Asp	Tyr	Asp	Ala	Asn	Phe	Lys	Ile	Lys	Asp
65					70					75					80
Phe	Pro	Glu	Lys	Ala	Lys	Asp	Ile	Phe	Ile	Glu	Ala	His	Leu		
				85					90						

<210> 4806  
 <211> 297  
 <212> PRT  
 <213> Homo sapiens

<400> 4806  
 Met Ala Leu Arg Val Thr Arg Asn Ser Lys Ile Asn Ala Glu Asn Lys  
 1 5 10 15  
 Ala Lys Ile Asn Met Ala Gly Ala Lys Arg Val Pro Thr Ala Pro Ala  
 20 25 30  
 Ala Thr Ser Lys Pro Gly Leu Arg Pro Arg Thr Ala Leu Gly Asp Ile  
 35 40 45  
 Gly Asn Lys Val Ser Glu Gln Leu Gln Ala Lys Met Pro Met Lys Lys  
 50 55 60  
 Glu Ala Lys Pro Ser Ala Thr Gly Lys Val Ile Asp Lys Lys Leu Pro  
 65 70 75 80  
 Lys Pro Leu Glu Lys Val Pro Met Leu Val Pro Val Pro Val Ser Glu  
 85 90 95  
 Pro Val Pro

<210> 4807  
 <211> 354  
 <212> PRT  
 <213> Homo sapiens

<400> 4807  
 Met Asp Ile Glu Ala Leu Lys Lys Leu Asn Lys Asn Xaa Lys Leu Val  
 1 5 10 15  
 Lys Lys Leu Ala Lys Lys Tyr Asp Ala Phe Leu Ala Ser Glu Ser Leu  
 20 25 30  
 Ile Lys Gln Ile Pro Arg Ile Leu Gly Pro Gly Leu Asn Lys Ala Gly  
 35 40 45  
 Lys Phe Pro Xaa Leu Leu Thr His Asn Glu Asn Met Val Ala Lys Val  
 50 55 60  
 Asp Glu Val Lys Ser Thr Ile Lys Phe Gln Met Lys Lys Val Leu Cys  
 65 70 75 80  
 Leu Ala Val Ala Val Gly His Val Lys Met Thr Asp Asp Glu Leu Val  
 85 90 95  
 Tyr Asn Ile His Leu Ala Val Asn Phe Leu Val Ser Leu Leu Lys Lys  
 100 105 110  
 Asn Trp Gln Asn Val Arg  
 115

<210> 4808  
 <211> 300  
 <212> PRT  
 <213> Homo sapiens

<400> 4808  
 Met Ala Gly His Arg Leu Val Leu Val Leu Gly Asp Leu His Ile Pro  
 1 5 10 15  
 His Arg Cys Asn Ser Leu Pro Ala Lys Phe Lys Lys Leu Leu Val Pro  
 20 25 30  
 Gly Lys Ile Gln His Ile Leu Cys Thr Gly Asn Leu Cys Thr Lys Glu

004220 6667560

```

      35          40          45
Ser Tyr Asp Tyr Leu Lys Thr Leu Ala Gly Asp Val His Ile Val Arg
  50          55          60
Gly Asp Phe Asp Glu Asn Leu Asn Tyr Pro Glu Gln Lys Val Val Thr
  65          70          75          80
Val Gly Gln Phe Arg Phe Ser Ser Lys Ala Pro Ser His Ser Pro Phe
      85          90          95
Ser Gly Gln Glu
      100

```

<210> 4809  
 <211> 441  
 <212> PRT  
 <213> Homo sapiens

```

<400> 4809
Met Leu Val Leu Val Leu Gly Asp Leu His Ile Pro His Arg Cys Asn
  1          5          10          15
Ser Leu Pro Ala Lys Phe Lys Lys Leu Leu Val Pro Gly Lys Ile Gln
      20          25          30
His Ile Leu Cys Thr Gly Asn Leu Cys Thr Lys Glu Ser Tyr Asp Tyr
      35          40          45
Leu Lys Thr Leu Ala Gly Asp Val His Ile Val Arg Gly Asp Phe Asp
      50          55          60
Glu Asn Leu Asn Tyr Pro Glu Gln Lys Val Val Thr Val Gly Gln Phe
      65          70          75          80
Lys Ile Gly Leu Ile His Gly His Gln Val Ile Pro Trp Gly Asp Met
      85          90          95
Ala Ser Leu Ala Leu Leu Gln Arg Gln Phe Asp Val Asp Ile Leu Ile
      100          105          110
Ser Gly His Thr His Lys Phe Glu Ala Phe Glu His Glu Asn Lys Phe
      115          120          125
Tyr Ile Asn Pro Gly Ser Ala Leu Gly His Ile Met Leu Gly Asn Lys
      130          135          140
His Tyr Ser
      145

```

<210> 4810  
 <211> 333  
 <212> PRT  
 <213> Homo sapiens

```

<400> 4810
Met Glu Thr Phe Ala Pro Lys Arg Val Met Thr Ile Xaa Arg Thr Leu
  1          5          10          15
Ala Gly Asp Val His Ile Val Arg Gly Asp Phe Asp Glu Asn Leu Asn
      20          25          30
Tyr Pro Glu Gln Lys Val Val Thr Val Gly Gln Phe Lys Ile Gly Leu
      35          40          45
Ile His Gly His Gln Val Ile Pro Trp Gly Asp Met Ala Ser Leu Ala
      50          55          60
Leu Leu Gln Arg Gln Phe Asp Val Asp Xaa Leu Ile Ser Gly His Thr
      65          70          75          80
Xaa Lys Phe Glu Ala Phe Glu His Glu Asn Lys Phe Tyr Ile Asn Pro

```

85 90 95  
 Gly Ser Ala Leu Gly His Ile Met Leu Gly Asn Lys His Tyr Ser  
 100 105 110

<210> 4811  
 <211> 207  
 <212> PRT  
 <213> Homo sapiens

<400> 4811  
 Met Thr Cys Cys Pro Gly Ser Ser Leu Leu His Thr Glu Cys Ser Gly  
 1 5 10 15  
 Ser Leu Asn His Cys Phe Ser Phe Glu Ser Arg Ala Ser Cys His Phe  
 20 25 30  
 His Val Ala Ser Ala Val Ser Pro Pro Thr Pro Val Leu Pro Cys His  
 35 40 45  
 Xaa Asp Gly Ser Arg Gln Gly Trp Gln Thr Leu Pro Xaa Thr Ser Leu  
 50 55 60  
 Ala Gln Lys Ala Ser  
 65

<210> 4812  
 <211> 330  
 <212> PRT  
 <213> Homo sapiens

<400> 4812  
 Met Trp Arg Val Lys Lys Leu Ser Leu Ser Leu Ser Pro Ser Pro Gln  
 1 5 10 15  
 Thr Gly Lys Arg Ser Met Arg Thr Pro Leu Arg Glu Leu Thr Leu Gln  
 20 25 30  
 Pro Gly Ala Leu Thr Asn Ser Gly Lys Arg Ser Pro Ala Cys Ser Ser  
 35 40 45  
 Leu Thr Pro Ser Leu Cys Lys Leu Gly Leu Gln Glu Gly Ser Asn Asn  
 50 55 60  
 Ser Ser Pro Val Asp Phe Val Asn Asn Lys Arg Thr Asp Leu Ser Ser  
 65 70 75 80  
 Glu His Phe Ser His Ser Ser Lys Trp Leu Glu Thr Cys Gln His Glu  
 85 90 95  
 Ser Asp Glu Gln Pro Leu Asp Pro Ile Pro Gln Ile Ser Ser  
 100 105 110

<210> 4813  
 <211> 447  
 <212> PRT  
 <213> Homo sapiens

<400> 4813  
 Met Ala Thr Glu Thr Val Glu Leu His Lys Leu Lys Leu Ala Glu Leu  
 1 5 10 15  
 Lys Gln Glu Cys Leu Ala Arg Gly Leu Glu Thr Lys Gly Ile Lys Gln  
 20 25 30  
 Asp Leu Ile His Arg Leu Gln Ala Tyr Leu Glu Glu His Ala Glu Glu  
 35 40 45



Glu Ala Asn Glu Glu Asp Val Leu Gly Asp Glu Thr Glu Glu Glu Glu  
 50 55 60  
 Thr Lys Pro Ile Glu Leu Pro Val Lys Glu Glu Glu Pro Pro Glu Lys  
 65 70 75 80  
 Thr Val Asp Val Ala Ala Glu Lys Lys Val Val Lys Ile Thr Ser Glu  
 85 90 95  
 Ile Pro Gln Thr Glu Arg Met Gln Lys Arg Ala Glu Arg Phe Asn Val  
 100 105 110  
 Pro Val Ser Leu Glu Ser Lys Lys Ala Ala Arg Ala Ala Arg Phe Gly  
 115 120 125  
 Ile Ser Ser Val Pro Thr Lys Gly Leu Ser Ser Asp Asn Lys Pro Met  
 130 135 140  
 Val Asn Leu Asp Lys  
 145

<210> 4814  
 <211> 339  
 <212> PRT  
 <213> Homo sapiens

<400> 4814  
 Met Gly Arg Glu Asn Trp Pro Glu Ala Ser Glu Ala Lys Glu Ile Lys  
 1 5 10 15  
 Leu Tyr Ala Gln Ile Pro Pro Ile Glu Lys Met Asp Ala Ser Leu Ser  
 20 25 30  
 Met Leu Ala Asn Cys Glu Lys Leu Ser Leu Ser Thr Asn Cys Ile Glu  
 35 40 45  
 Lys Ile Ala Asn Leu Asn Gly Leu Lys Asn Leu Arg Ile Leu Ser Leu  
 50 55 60  
 Gly Arg Asn Asn Ile Lys Asn Leu Asn Gly Leu Glu Ala Val Gly Asp  
 65 70 75 80  
 Thr Leu Glu Glu Leu Trp Ile Ser Tyr Asn Phe Ile Glu Lys Leu Lys  
 85 90 95  
 Gly Ile His Ile Met Lys Lys Leu Lys Ile Leu Tyr Met Ser Asn Asn  
 100 105 110  
 Leu

<210> 4815  
 <211> 402  
 <212> PRT  
 <213> Homo sapiens

<400> 4815  
 Met Ala Ser Gly Ser Gly Thr Lys Asn Leu Asp Phe Arg Arg Lys Trp  
 1 5 10 15  
 Asp Lys Asp Glu Tyr Glu Lys Leu Ala Glu Lys Arg Leu Thr Glu Glu  
 20 25 30  
 Arg Glu Lys Lys Asp Gly Lys Pro Val Gln Pro Val Lys Arg Glu Leu  
 35 40 45  
 Leu Arg His Arg Asp Tyr Lys Val Asp Leu Glu Ser Lys Leu Gly Lys  
 50 55 60  
 Thr Ile Val Ile Thr Lys Thr Thr Pro Gln Ser Glu Met Gly Gly Tyr  
 65 70 75 80  
 Tyr Cys Asn Val Cys Asp Cys Val Val Lys Asp Ser Ile Asn Phe Leu

85                      90                      95  
 Asp His Ile Asn Gly Xaa Lys His Gln Arg Asn Leu Gly Met Ser Met  
                     100                      105                      110  
 Arg Val Glu Arg Ser Thr Leu Asp Gln Val Lys Lys Arg Phe Glu Val  
                     115                      120                      125  
 Asn Lys Lys Lys Met Glu  
                     130

<210> 4816  
 <211> 393  
 <212> PRT  
 <213> Homo sapiens

<400> 4816  
 Met Ala Ser Gly Ser Gly Thr Lys Asn Leu Asp Phe Arg Arg Lys Trp  
 1                      5                      10                      15  
 Asp Lys Asp Glu Tyr Glu Lys Leu Ala Glu Lys Arg Leu Thr Glu Glu  
                     20                      25                      30  
 Arg Glu Lys Lys Asp Gly Lys Pro Val Gln Pro Val Lys Arg Glu Leu  
                     35                      40                      45  
 Leu Arg His Arg Asp Tyr Lys Val Asp Leu Glu Ser Lys Leu Gly Lys  
                     50                      55                      60  
 Thr Ile Val Ile Thr Lys Thr Thr Pro Gln Ser Glu Met Gly Gly Tyr  
 65                      70                      75                      80  
 Tyr Cys Asn Val Cys Pro Ile Val Tyr Leu Thr Ile Phe Leu Leu Leu  
                     85                      90                      95  
 Ser Ser Leu Ser Ser Tyr Leu Ala Tyr Leu Ser Ile His Leu Arg Val  
                     100                      105                      110  
 Cys Leu Gln Pro Pro Pro Val Cys Pro Ser Val Gln Leu Pro Val Thr  
                     115                      120                      125  
 Leu Cys Ile  
                     130

<210> 4817  
 <211> 174  
 <212> PRT  
 <213> Homo sapiens

<400> 4817  
 Met Gly Gly Tyr Tyr Cys Asn Val Cys Asp Cys Val Val Lys Asp Ser  
 1                      5                      10                      15  
 Ile Asn Phe Leu Asp His Ile Asn Gly Xaa Lys His Gln Arg Asn Leu  
                     20                      25                      30  
 Gly Met Ser Met Arg Val Glu Arg Ser Thr Leu Asp Gln Val Lys Lys  
                     35                      40                      45  
 Arg Phe Glu Val Asn Lys Lys Lys Met Glu  
                     50                      55

<210> 4818  
 <211> 336  
 <212> PRT  
 <213> Homo sapiens

<400> 4818

004220"666E560

Met Lys His Ile Asn Leu Ser Phe Ala Ala Cys Gly Phe Leu Gly Ile  
 1 5 10 15  
 Tyr His Leu Gly Ala Ala Ser Ala Leu Cys Arg His Gly Lys Lys Leu  
 20 25 30  
 Val Lys Asp Val Lys Ala Phe Ala Gly Ala Ser Ala Gly Ser Leu Val  
 35 40 45  
 Ala Ser Val Leu Leu Thr Ala Pro Glu Lys Ile Glu Glu Cys Asn Gln  
 50 55 60  
 Phe Thr Tyr Lys Phe Ala Glu Glu Ile Arg Arg Gln Ser Phe Gly Ala  
 65 70 75 80  
 Val Thr Pro Gly Tyr Asp Phe Met Ala Arg Leu Arg Ser Gly Met Glu  
 85 90 95  
 Ser Ile Leu Pro Pro Ser Ala His Glu Leu Ala Gln Asn Arg Leu His  
 100 105 110

<210> 4819  
 <211> 459  
 <212> PRT  
 <213> Homo sapiens

<400> 4819  
 Met Ala Val Val Ser Ala Val Arg Trp Leu Gly Leu Arg Ser Arg Leu  
 1 5 10 15  
 Gly Gln Pro Leu Thr Gly Arg Arg Ala Gly Leu Cys Glu Gln Ala Arg  
 20 25 30  
 Ser Cys Arg Phe Tyr Ser Gly Ser Ala Thr Leu Ser Lys Val Glu Gly  
 35 40 45  
 Thr Asp Val Thr Gly Ile Glu Glu Val Val Ile Pro Lys Lys Lys Thr  
 50 55 60  
 Trp Asp Lys Val Ala Val Leu Gln Ala Leu Ala Ser Thr Val Asn Arg  
 65 70 75 80  
 Asp Thr Thr Ala Val Pro Tyr Val Phe Gln Asp Asp Pro Tyr Leu Met  
 85 90 95  
 Pro Ala Ser Ser Leu Glu Ser Arg Ser Phe Leu Leu Ala Lys Lys Ser  
 100 105 110  
 Gly Glu Asn Val Ala Lys Phe Ile Ile Asn Ser Tyr Pro Lys Tyr Phe  
 115 120 125  
 Gln Lys Asp Ile Ala Glu Pro His Ile Pro Cys Leu Met Pro Glu Tyr  
 130 135 140  
 Phe Glu Pro Gln Ile Lys Asp Ile Ser  
 145 150

<210> 4820  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 4820  
 Met Ala Glu Phe Leu Asp Asp Gln Glu Thr Arg Leu Cys Asp Asn Cys  
 1 5 10 15  
 Lys Lys Glu Ile Pro Val Phe Asn Phe Thr Ile His Glu Ile His Cys  
 20 25 30  
 Gln Arg Asn Ile Gly Met Cys Pro Thr Cys Lys Glu Pro Phe Pro Lys  
 35 40 45

Ser Asp Met Glu Thr His Met Thr Ala Glu His Cys Gln  
 50 55 60

<210> 4821  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<400> 4821  
 Met Asp Ile Leu Lys Ser Glu Ile Leu Arg Lys Arg Gln Leu Val Glu  
 1 5 10 15  
 Asp Arg Asn Leu Leu Val Glu Asn Lys Lys Tyr Phe Lys Arg Ser Glu  
 20 25 30  
 Leu Ala Lys Lys Glu Glu Glu Ala Tyr Phe Glu Arg Cys Gly Tyr Lys  
 35 40 45  
 Ile Gln Pro Lys Glu Glu Asp  
 50 55

<210> 4822  
 <211> 288  
 <212> PRT  
 <213> Homo sapiens

<400> 4822  
 Met Pro Gly His Leu Gln Glu Gly Phe Gly Cys Val Val Thr Asn Arg  
 1 5 10 15  
 Phe Asp Gln Leu Phe Asp Asp Glu Ser Asp Pro Phe Glu Val Leu Lys  
 20 25 30  
 Ala Ala Glu Asn Lys Lys Lys Glu Ala Gly Gly Gly Gly Val Gly Gly  
 35 40 45  
 Pro Gly Ala Lys Ser Ala Xaa Arg Pro Arg Pro Arg Pro Thr Pro Thr  
 50 55 60  
 Xaa Gln Ala Asn Ser Cys Ala Arg Ser Pro Arg Lys Thr Ala Arg Thr  
 65 70 75 80  
 Arg Cys Pro Pro Ala Leu Ala Trp Leu Thr Arg Lys Arg Arg Arg Ser  
 85 90 95

<210> 4823  
 <211> 345  
 <212> PRT  
 <213> Homo sapiens

<400> 4823  
 Met His Arg Asp Ser Cys Pro Leu Asp Cys Lys Val Tyr Val Gly Asn  
 1 5 10 15  
 Leu Gly Asn Asn Gly Asn Lys Thr Glu Leu Glu Arg Ala Phe Gly Tyr  
 20 25 30  
 Tyr Gly Pro Leu Arg Ser Val Trp Val Ala Arg Asn Pro Pro Gly Phe  
 35 40 45  
 Ala Phe Val Glu Phe Glu Asp Pro Arg Asp Ala Ala Asp Ala Val Arg  
 50 55 60  
 Glu Leu Asp Gly Arg Thr Leu Cys Gly Cys Arg Val Arg Val Glu Leu  
 65 70 75 80  
 Ser Asn Gly Glu Lys Arg Ser Arg Asn Arg Gly Pro Xaa Pro Ser Trp

004220"666ET560

				85					90					95			
Gly	Arg	Arg	Pro	Arg	Asp	Asp	Tyr	Arg	Arg	Arg	Ser	Pro	Pro	Xaa	Arg		
			100					105					110				
Arg	Arg	Ser															
		115															

<210> 4824  
 <211> 330  
 <212> PRT  
 <213> Homo sapiens

<400> 4824																	
Met	Gly	Lys	Gly	Asp	Pro	Lys	Lys	Pro	Arg	Gly	Lys	Met	Ser	Ser	Tyr		
1				5					10					15			
Ala	Phe	Phe	Val	Gln	Thr	Cys	Arg	Glu	Glu	His	Lys	Lys	Lys	His	Pro		
			20					25					30				
Asp	Ala	Ser	Val	Asn	Phe	Ser	Glu	Phe	Ser	Lys	Lys	Cys	Ser	Glu	Arg		
		35					40					45					
Trp	Lys	Thr	Met	Ser	Ala	Lys	Glu	Lys	Gly	Lys	Phe	Glu	Asp	Met	Ala		
	50					55					60						
Lys	Ala	Asp	Lys	Ala	Arg	Tyr	Glu	Arg	Glu	Met	Lys	Thr	Tyr	Ile	Pro		
65				70					75					80			
Pro	Lys	Gly	Glu	Thr	Lys	Lys	Lys	Phe	Lys	Xaa	Pro	Asn	Ala	Pro	Lys		
				85					90					95			
Arg	Pro	Pro	Ser	Ala	Phe	Phe	Leu	Phe	Cys	Ser	Glu	Tyr	Arg				
			100					105					110				

<210> 4825  
 <211> 330  
 <212> PRT  
 <213> Homo sapiens

<400> 4825																	
Met	Gly	Lys	Gly	Asp	Pro	Lys	Lys	Pro	Arg	Gly	Xaa	Met	Ser	Ser	Tyr		
1				5					10					15			
Xaa	Phe	Phe	Val	Gln	Thr	Cys	Arg	Glu	Glu	His	Lys	Xaa	Lys	His	Pro		
			20					25					30				
Asp	Ala	Ser	Val	Asn	Phe	Ser	Glu	Phe	Ser	Lys	Lys	Cys	Ser	Glu	Arg		
		35					40					45					
Trp	Lys	Thr	Met	Ser	Ala	Lys	Glu	Lys	Gly	Lys	Phe	Glu	Asp	Met	Ala		
	50					55					60						
Lys	Ala	Asp	Lys	Ala	Arg	Tyr	Glu	Arg	Glu	Met	Lys	Thr	Tyr	Ile	Pro		
65				70					75					80			
Pro	Lys	Gly	Glu	Thr	Lys	Lys	Lys	Phe	Lys	Xaa	Pro	Asn	Ala	Pro	Lys		
				85					90					95			
Arg	Pro	Pro	Ser	Ala	Phe	Phe	Leu	Phe	Cys	Ser	Glu	Tyr	Arg				
			100					105					110				

<210> 4826  
 <211> 177  
 <212> PRT  
 <213> Homo sapiens

<400> 4826

Met Ser Ala Lys Glu Lys Gly Lys Phe Glu Asp Met Ala Lys Ala Asp  
 1 5 10 15  
 Lys Ala Arg Tyr Glu Arg Glu Met Lys Thr Tyr Ile Pro Pro Lys Gly  
 20 25 30  
 Glu Thr Lys Lys Lys Phe Lys Gly Pro Asn Ala Pro Lys Arg Pro Pro  
 35 40 45  
 Ser Ala Phe Phe Leu Phe Cys Ser Glu Tyr Arg  
 50 55

<210> 4827  
 <211> 192  
 <212> PRT  
 <213> Homo sapiens

<400> 4827  
 Met Ala Asp Ala Phe Gly Asp Glu Leu Phe Ser Val Phe Glu Gly Asp  
 1 5 10 15  
 Ser Thr Thr Ala Ala Gly Thr Lys Lys Asp Lys Glu Lys Asp Lys Gly  
 20 25 30  
 Lys Trp Lys Gly Pro Pro Gly Ser Ala Asp Lys Ala Gly Lys Arg Phe  
 35 40 45  
 Asp Gly Lys Leu Gln Ser Glu Ser Thr Asn Asn Gly Lys Asn Lys Arg  
 50 55 60

<210> 4828  
 <211> 396  
 <212> PRT  
 <213> Homo sapiens

<400> 4828  
 Met Asp Tyr Gln Gly Arg Ser Thr Gly Glu Ala Phe Val Gln Phe Ala  
 1 5 10 15  
 Ser Lys Glu Ile Ala Glu Asn Ala Leu Gly Lys His Lys Glu Arg Ile  
 20 25 30  
 Gly His Arg Tyr Ile Glu Ile Phe Arg Ser Ser Arg Ser Glu Ile Lys  
 35 40 45  
 Gly Phe Tyr Asp Pro Pro Arg Arg Leu Leu Gly Gln Arg Pro Gly Pro  
 50 55 60  
 Tyr Asp Arg Pro Ile Gly Gly Arg Gly Gly Tyr Tyr Gly Ala Gly Arg  
 65 70 75 80  
 Gly Ser Met Tyr Asp Arg Met Arg Arg Gly Gly Asp Gly Tyr Asp Gly  
 85 90 95  
 Gly Tyr Gly Gly Phe Asp Asp Tyr Gly Tyr Asn Asn Tyr Gly Tyr  
 100 105 110  
 Gly Asn Asp Gly Phe Asp Glu Arg Lys Lys Thr Arg Lys Arg Arg Arg  
 115 120 125  
 Arg Lys Arg Arg  
 130

<210> 4829  
 <211> 171  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 4829

Met Glu Leu Gly Val Glu Val Cys Met Thr Glu Cys Asp Glu Glu Val  
 1 5 10 15  
 Met Asp Met Met Val Val Met Glu Val Leu Met Thr Met Val Ala Ile  
 20 25 30  
 Ile Ile Thr Ala Met Gly Met Met Ala Leu Met Lys Glu Arg Arg Gln  
 35 40 45  
 Gly Lys Gly Gly Gly Gly Arg Gly Glu  
 50 55

&lt;210&gt; 4830

&lt;211&gt; 171

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4830

Met Glu Leu Gly Val Glu Val Cys Met Thr Glu Cys Asp Glu Glu Val  
 1 5 10 15  
 Met Asp Met Met Val Val Met Glu Val Leu Met Thr Met Val Ala Ile  
 20 25 30  
 Ile Ile Thr Ala Met Gly Met Met Ala Leu Met Lys Glu Arg Arg Gln  
 35 40 45  
 Gly Lys Gly Gly Gly Gly Arg Gly Glu  
 50 55

&lt;210&gt; 4831

&lt;211&gt; 396

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4831

Met Asp Tyr Gln Gly Arg Ser Thr Gly Glu Ala Phe Val Gln Phe Ala  
 1 5 10 15  
 Ser Lys Glu Ile Ala Glu Asn Ala Leu Gly Lys His Lys Glu Arg Ile  
 20 25 30  
 Gly His Arg Tyr Ile Glu Ile Phe Arg Ser Ser Arg Ser Glu Ile Lys  
 35 40 45  
 Gly Phe Tyr Asp Pro Pro Arg Arg Leu Leu Gly Gln Arg Pro Gly Pro  
 50 55 60  
 Tyr Asp Arg Pro Ile Gly Gly Arg Gly Gly Tyr Tyr Gly Ala Gly Arg  
 65 70 75 80  
 Gly Ser Met Tyr Asp Arg Met Arg Arg Gly Gly Asp Gly Tyr Asp Gly  
 85 90 95  
 Gly Tyr Gly Gly Phe Asp Asp Tyr Gly Gly Tyr Asn Asn Tyr Gly Tyr  
 100 105 110  
 Gly Asn Asp Gly Phe Asp Glu Arg Lys Lys Thr Arg Lys Arg Arg Arg  
 115 120 125  
 Arg Lys Arg Arg  
 130

&lt;210&gt; 4832

&lt;211&gt; 924

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

<400> 4832

Met Met Leu Gly Thr Glu Gly Gly Glu Gly Phe Val Val Lys Val Arg  
 1 5 10 15  
 Gly Leu Pro Trp Ser Cys Ser Ala Asp Glu Val Gln Arg Phe Phe Ser  
 20 25 30  
 Asp Cys Lys Ile Gln Asn Gly Ala Gln Gly Ile Arg Phe Ile Tyr Thr  
 35 40 45  
 Arg Glu Gly Arg Pro Ser Gly Glu Ala Phe Val Glu Leu Glu Ser Glu  
 50 55 60  
 Asp Glu Val Lys Leu Ala Leu Lys Lys Asp Arg Glu Thr Met Gly His  
 65 70 75 80  
 Arg Tyr Val Glu Val Phe Lys Ser Asn Asn Val Glu Met Asp Trp Val  
 85 90 95  
 Leu Lys His Thr Gly Pro Asn Ser Pro Asp Thr Ala Asn Asp Gly Phe  
 100 105 110  
 Val Arg Leu Arg Gly Leu Pro Phe Gly Cys Ser Lys Glu Glu Ile Val  
 115 120 125  
 Gln Phe Phe Ser Gly Leu Glu Ile Val Pro Asn Gly Ile Thr Leu Pro  
 130 135 140  
 Val Asp Phe Gln Gly Arg Ser Thr Gly Glu Ala Phe Val Gln Phe Ala  
 145 150 155 160  
 Ser Gln Glu Ile Ala Glu Lys Ala Leu Lys Lys His Lys Glu Arg Ile  
 165 170 175  
 Gly His Arg Tyr Ile Glu Ile Phe Lys Ser Ser Arg Ala Glu Val Arg  
 180 185 190  
 Thr His Tyr Asp Pro Pro Arg Lys Leu Met Ala Met Gln Arg Pro Gly  
 195 200 205  
 Pro Tyr Asp Arg Pro Gly Ala Gly Arg Gly Tyr Asn Ser Ile Gly Arg  
 210 215 220  
 Gly Ala Gly Phe Glu Arg Met Arg Arg Gly Ala Tyr Gly Gly Tyr  
 225 230 235 240  
 Gly Gly Tyr Asp Asp Tyr Gly Gly Tyr Asn Asp Gly Tyr Gly Phe Gly  
 245 250 255  
 Ser Asp Arg Phe Gly Arg Asp Leu Asn Tyr Cys Phe Ser Gly Met Ser  
 260 265 270  
 Asp His Arg Tyr Gly Asp Gly Gly Ser Ser Phe Gln Ser Thr Thr Gly  
 275 280 285  
 His Cys Val His Met Arg Gly Leu Pro Tyr Arg Ala Thr Glu Asn Asp  
 290 295 300  
 Ile Tyr Xaa Phe  
 305

<210> 4833

<211> 228

<212> PRT

<213> Homo sapiens

<400> 4833

Met Met Leu Ser Thr Glu Gly Arg Glu Gly Phe Val Val Lys Val Arg  
 1 5 10 15  
 Gly Leu Pro Trp Ser Cys Ser Ala Asp Glu Val Met Arg Phe Phe Ser  
 20 25 30  
 Asp Cys Lys Ile Gln Asn Gly Thr Ser Gly Ile Arg Phe Ile Tyr Thr



35                      40                      45  
 Arg Glu Gly Arg Pro Ser Gly Glu Ala Phe Val Glu Leu Glu Ser Glu  
 50                      55                      60  
 Glu Glu Val Lys Leu Ala Leu Lys Lys Asp Arg Glu  
 65                      70                      75

<210> 4834  
 <211> 282  
 <212> PRT  
 <213> Homo sapiens

<400> 4834  
 Met Cys Pro Arg Ile Leu Asp Tyr Leu Arg Lys Lys Arg Xaa Xaa Glu  
 1                      5                      10                      15  
 Xaa Lys Pro Thr Ser Gln Gly Lys Ser Ser Ser Lys Lys Glu Met Ser  
 20                      25                      30  
 Lys Arg Asp Gly Lys Glu Lys Lys Asp Arg Gly Val Thr Arg Phe Gln  
 35                      40                      45  
 Glu Asn Ala Ser Glu Gly Lys Ala Pro Ala Glu Asp Val Phe Lys Lys  
 50                      55                      60  
 Pro Leu Pro Pro Thr Val Lys Lys Glu Glu Ser Xaa Pro Pro Pro Lys  
 65                      70                      75                      80  
 Val Val Asn Pro Leu Ile Gly Xaa Leu Gly Glu Tyr Gly Gly  
 85                      90

<210> 4835  
 <211> 357  
 <212> PRT  
 <213> Homo sapiens

<400> 4835  
 Met Tyr Gly Phe Val Asn His Ala Leu Glu Leu Leu Val Ile Arg Asn  
 1                      5                      10                      15  
 Tyr Gly Pro Glu Val Trp Glu Asp Ile Lys Lys Glu Ala Gln Leu Asp  
 20                      25                      30  
 Glu Glu Gly Gln Phe Leu Val Arg Ile Ile Tyr Asp Asp Ser Lys Thr  
 35                      40                      45  
 Tyr Asp Leu Val Ala Ala Ala Ser Lys Val Leu Asn Leu Asn Ala Gly  
 50                      55                      60  
 Glu Ile Leu Gln Met Phe Gly Lys Met Phe Phe Val Phe Cys Gln Glu  
 65                      70                      75                      80  
 Ser Gly Tyr Asp Thr Ile Leu Arg Val Leu Gly Ser Asn Val Arg Glu  
 85                      90                      95  
 Phe Leu Gln Asn Leu Asp Ala Leu His Asp His Leu Ala Thr Ile Xaa  
 100                      105                      110  
 Xaa Gly Met Arg Ala Pro Ser  
 115

<210> 4836  
 <211> 654  
 <212> PRT  
 <213> Homo sapiens

<400> 4836

Met Val Phe Arg Arg Phe Val Glu Val Gly Arg Val Ala Tyr Val Ser  
 1 5 10 15  
 Phe Gly Pro His Ala Gly Lys Leu Val Ala Ile Val Asp Val Ile Asp  
 20 25 30  
 Gln Asn Arg Ala Leu Val Asp Gly Pro Cys Thr Gln Val Arg Arg Gln  
 35 40 45  
 Ala Met Pro Phe Lys Cys Met Gln Leu Thr Asp Phe Ile Leu Lys Phe  
 50 55 60  
 Pro His Ser Ala His Gln Lys Tyr Val Arg Gln Ala Trp Gln Lys Ala  
 65 70 75 80  
 Asp Ile Asn Thr Lys Trp Ala Ala Thr Arg Trp Ala Lys Lys Ile Glu  
 85 90 95  
 Ala Arg Glu Arg Lys Ala Lys Met Thr Asp Phe Asp Arg Phe Lys Val  
 100 105 110  
 Met Lys Ala Lys Lys Met Arg Asn Arg Ile Ile Lys Asn Glu Val Lys  
 115 120 125  
 Lys Leu Gln Lys Ala Ala Leu Leu Lys Ala Ser Pro Lys Lys Ala Pro  
 130 135 140  
 Gly Thr Lys Gly Thr Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala  
 145 150 155 160  
 Ala Ala Ala Ala Lys Val Pro Ala Lys Lys Ile Thr Ala Ala Ser Lys  
 165 170 175  
 Lys Ala Pro Ala Gln Lys Val Pro Ala Gln Lys Ala Thr Gly Gln Lys  
 180 185 190  
 Ala Ala Pro Ala Xaa Lys Ala Gln Lys Gly Gln Lys Ala Pro Ala Gln  
 195 200 205  
 Lys Ala Pro Ala Pro Lys Ala Ser Gly Xaa  
 210 215

<210> 4837  
 <211> 306  
 <212> PRT  
 <213> Homo sapiens

<400> 4837  
 Met Val Phe Arg Arg Phe Val Glu Val Gly Arg Val Ala Tyr Val Ser  
 1 5 10 15  
 Phe Gly Pro His Ala Gly Lys Leu Val Ala Ile Val Asp Val Ile Asp  
 20 25 30  
 Gln Asn Arg Ala Leu Val Asp Gly Pro Cys Thr Gln Val Arg Arg Gln  
 35 40 45  
 Ala Met Pro Phe Lys Cys Met Gln Leu Thr Asp Phe Ile Leu Lys Phe  
 50 55 60  
 Pro His Ser Ala His Gln Lys Tyr Val Arg Gln Ala Trp Gln Lys Ala  
 65 70 75 80  
 Asp Ile Asn Thr Lys Trp Ala Xaa Thr Arg Trp Ala Leu Leu His Phe  
 85 90 95  
 Leu Leu Glu Asp Leu Phe  
 100

<210> 4838  
 <211> 426  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 4838

Met Val Phe Arg Arg Phe Val Glu Val Gly Arg Val Ala Tyr Val Ser  
 1 5 10 15  
 Phe Gly Pro His Ala Gly Lys Leu Val Ala Ile Val Asp Val Ile Asp  
 20 25 30  
 Gln Asn Arg Ala Leu Val Asp Gly Pro Cys Thr Gln Val Arg Arg Gln  
 35 40 45  
 Ala Met Pro Phe Lys Cys Met Gln Leu Thr Asp Phe Ile Leu Lys Phe  
 50 55 60  
 Pro His Ser Ala His Gln Lys Tyr Val Arg Gln Ala Trp Gln Lys Ala  
 65 70 75 80  
 Asp Ile Asn Thr Lys Trp Ala Ala Thr Arg Trp Ala Lys Lys Ile Glu  
 85 90 95  
 Ala Arg Glu Arg Lys Ala Lys Met Thr Asp Phe Asp Arg Phe Lys Val  
 100 105 110  
 Met Lys Ala Lys Lys Met Arg Asn Arg Ile Ile Lys Asn Glu Val Lys  
 115 120 125  
 Lys Leu Gln Lys Ala Ala Leu Glu Ile Arg Leu Phe Leu Phe  
 130 135 140

&lt;210&gt; 4839

&lt;211&gt; 675

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4839

Met Val Phe Arg Arg Phe Val Glu Val Gly Arg Val Ala Tyr Val Ser  
 1 5 10 15  
 Phe Gly Pro His Ala Gly Lys Leu Val Ala Ile Val Asp Val Ile Asp  
 20 25 30  
 Gln Asn Arg Ala Leu Val Asp Gly Pro Cys Thr Gln Val Arg Arg Gln  
 35 40 45  
 Ala Met Pro Phe Lys Cys Met Gln Leu Thr Asp Phe Ile Leu Lys Phe  
 50 55 60  
 Pro His Ser Ala His Gln Lys Tyr Val Arg Gln Ala Trp Gln Lys Ala  
 65 70 75 80  
 Asp Ile Asn Thr Lys Trp Ala Ala Thr Arg Trp Ala Lys Lys Ile Glu  
 85 90 95  
 Ala Arg Glu Arg Lys Ala Lys Met Thr Asp Phe Asp Arg Phe Lys Val  
 100 105 110  
 Met Lys Ala Lys Lys Met Arg Asn Arg Ile Ile Lys Asn Glu Val Lys  
 115 120 125  
 Lys Leu Gln Lys Ala Ala Leu Leu Lys Ala Ser Pro Lys Lys Ala Pro  
 130 135 140  
 Gly Thr Lys Gly Thr Ala Ala Ala Ala Ala Ala Ala Ala Ala  
 145 150 155 160  
 Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Lys Val Pro Ala Lys  
 165 170 175  
 Lys Ile Thr Ala Ala Ser Lys Lys Ala Pro Ala Gln Lys Val Pro Ala  
 180 185 190  
 Gln Lys Ala Thr Gly Gln Lys Ala Ala Pro Ala Xaa Lys Ala Gln Lys  
 195 200 205  
 Gly Gln Lys Ala Pro Ala Gln Lys Ala Pro Ala Pro Lys Ala Ser Gly

210  
Xaa  
225

215

220

<210> 4840  
<211> 654  
<212> PRT  
<213> Homo sapiens

<400> 4840

Met Val Phe Arg Arg Phe Val Glu Val Gly Arg Val Ala Tyr Val Ser  
1 5 10 15  
Phe Gly Pro His Ala Gly Lys Leu Val Ala Ile Val Asp Val Ile Asp  
20 25 30  
Gln Asn Arg Ala Leu Val Asp Gly Pro Cys Thr Gln Val Arg Arg Gln  
35 40 45  
Ala Met Pro Phe Lys Cys Met Gln Leu Thr Asp Phe Ile Leu Lys Phe  
50 55 60  
Pro His Ser Ala Xaa Gln Lys Tyr Val Arg Gln Ala Trp Gln Lys Ala  
65 70 75 80  
Asp Ile Asn Thr Lys Trp Ala Ala Thr Arg Trp Ala Lys Lys Ile Glu  
85 90 95  
Ala Arg Glu Arg Lys Ala Lys Met Xaa Asp Phe Asp Arg Phe Lys Val  
100 105 110  
Met Lys Ala Lys Lys Met Arg Asn Arg Ile Ile Lys Asn Glu Val Lys  
115 120 125  
Lys Leu Gln Lys Ala Ala Leu Leu Lys Ala Ser Pro Lys Lys Ala Pro  
130 135 140  
Gly Thr Lys Gly Thr Ala Ala Ala Ala Ala Ala Ala Ala Ala  
145 150 155 160  
Ala Ala Ala Ala Lys Val Pro Ala Lys Lys Ile Thr Ala Ala Ser Lys  
165 170 175  
Lys Ala Pro Ala Gln Lys Val Pro Ala Gln Lys Ala Thr Gly Gln Lys  
180 185 190  
Ala Ala Pro Ala Xaa Lys Ala Gln Lys Gly Gln Lys Ala Pro Ala Gln  
195 200 205  
Lys Ala Pro Ala Pro Lys Ala Ser Gly Xaa  
210 215

<210> 4841  
<211> 321  
<212> PRT  
<213> Homo sapiens

<400> 4841

Met Pro Ser Ile Lys Leu Gln Ser Ser Asp Gly Glu Ile Phe Glu Val  
1 5 10 15  
Asp Val Glu Ile Ala Lys Gln Ser Val Thr Ile Lys Thr Met Leu Glu  
20 25 30  
Asp Leu Gly Met Asp Asp Glu Gly Asp Asp Asp Pro Val Pro Leu Pro  
35 40 45  
Asn Val Asn Ala Ala Ile Leu Lys Lys Val Ile Gln Trp Cys Thr His  
50 55 60  
His Lys Asp Asp Pro Pro Pro Pro Glu Asp Asp Glu Asn Lys Glu Lys

65                      70                      75                      80  
 Arg Thr Asp Asp Ile Pro Val Trp Asp Gln Glu Phe Leu Lys Val Asp  
                          85                      90                      95  
 Gln Gly His Phe Leu Asn Ser Phe Trp Leu Gln  
                          100                      105

<210> 4842  
 <211> 321  
 <212> PRT  
 <213> Homo sapiens

<400> 4842  
 Met Glu Gln Thr Trp Thr Arg Asp Tyr Phe Ala Glu Asp Asp Gly Glu  
 1                      5                      10                      15  
 Met Val Pro Arg Thr Ser His Thr Ala Ala Phe Leu Ser Asp Thr Lys  
                          20                      25                      30  
 Asp Arg Gly Pro Pro Val Gln Ser Gln Ile Trp Arg Ser Gly Glu Lys  
                          35                      40                      45  
 Val Pro Phe Val Gln Thr Tyr Ser Leu Arg Ala Phe Glu Lys Pro Pro  
                          50                      55                      60  
 Gln Val Gln Thr Gln Ala Leu Arg Asp Phe Glu Lys His Leu Asn Asp  
 65                      70                      75                      80  
 Leu Lys Lys Glu Asn Phe Ser Leu Lys Leu Arg Ile Tyr Phe Leu Glu  
                          85                      90                      95  
 Glu Arg Met Gln Gln Lys Tyr Glu Ala Ser Arg  
                          100                      105

<210> 4843  
 <211> 303  
 <212> PRT  
 <213> Homo sapiens

<400> 4843  
 Met Glu Glu Glu Gln Asp Leu Pro Glu Gln Pro Val Lys Lys Ala Lys  
 1                      5                      10                      15  
 Met Gln Glu Ser Gly Glu Gln Thr Ile Ser Gln Val Ser Asn Pro Asp  
                          20                      25                      30  
 Val Ser Asp Gln Lys Pro Glu Thr Ser Ser Leu Ala Ser Asn Leu Pro  
                          35                      40                      45  
 Met Ser Glu Glu Ile Met Thr Cys Thr Asp Tyr Ile Pro Arg Ser Ser  
                          50                      55                      60  
 Asn Asp Tyr Thr Ser Gln Met Tyr Ser Ala Lys Pro Tyr Ala His Ile  
 65                      70                      75                      80  
 Leu Ser Val Pro Val Ser Glu Thr Ala Tyr Pro Gly Gln Thr Gln Tyr  
                          85                      90                      95  
 Gln Thr Leu Gln Gln  
                          100

<210> 4844  
 <211> 297  
 <212> PRT  
 <213> Homo sapiens

<400> 4844



Glu Ser Gln Lys Pro Arg Gln Lys Lys Ala Pro Glu Phe Pro Ile Leu  
 20 25 30  
 Glu Lys Gln Asn Trp Leu Xaa His Leu His Tyr Ile Arg Lys Asp Tyr  
 35 40 45  
 Glu Ala Cys Lys Ala Val Ile Lys Glu Gln Leu Gln Glu Thr Gln Gly  
 50 55 60  
 Leu Cys Glu Tyr Ala Ile Tyr Val Gln Ala Leu Ile Phe Arg Leu Glu  
 65 70 75 80  
 Gly Asn Ile Gln Glu Ser Leu Glu Leu Phe Gln Thr Cys Ala Val Leu  
 85 90 95  
 Ser Pro Gln Ser Ala Asp Asn Leu Lys Gln Val Ala Arg Ser Leu Phe  
 100 105 110  
 Leu Leu Gly Lys His Lys Ala Ala Ile Glu Val Tyr Asn Glu Ala Ala  
 115 120 125  
 Lys

<210> 4848  
 <211> 189  
 <212> PRT  
 <213> Homo sapiens

<400> 4848  
 Met Glu Arg Ser Gly Pro Ser Glu Val Thr Gly Ser Asp Ala Ser Gly  
 1 5 10 15  
 Pro Asp Pro Gln Leu Ala Val Thr Met Gly Phe Thr Gly Phe Gly Lys  
 20 25 30  
 Lys Ala Arg Thr Phe Asp Leu Glu Ala Met Phe Glu Gln Thr Arg Arg  
 35 40 45  
 Thr Ala Val Glu Arg Ser Arg Lys Thr Leu Glu Ala Arg Glu Lys  
 50 55 60

<210> 4849  
 <211> 222  
 <212> PRT  
 <213> Homo sapiens

<400> 4849  
 Met Thr Lys Leu Gln Gly Ala Glu His Gly Lys Lys Gly Arg Gly Leu  
 1 5 10 15  
 Glu Tyr Leu Tyr Leu Ser Val His Asp Glu Asp Arg Asp Asp His Thr  
 20 25 30  
 Arg Cys Asn Val Trp Ile Leu Asp Gly Asp Leu Tyr His Lys Gly Leu  
 35 40 45  
 Leu Lys Phe Ala Val Ser Ala Glu Ser Leu Pro Glu Thr Leu Val Ile  
 50 55 60  
 Phe Val Ala Asp Met Ser Arg Pro Trp Thr  
 65 70

<210> 4850  
 <211> 198  
 <212> PRT  
 <213> Homo sapiens

<400> 4850

Met Glu Asp Lys Val Thr Ser Pro Glu Lys Ala Glu Glu Ala Lys Leu  
 1 5 10 15  
 Lys Ala Arg Tyr Pro His Leu Gly Gln Lys Pro Gly Gly Ser Asp Phe  
 20 25 30  
 Leu Arg Lys Arg Leu Gln Lys Gly Gln Lys Tyr Phe Asp Ser Gly Asp  
 35 40 45  
 Tyr Asn Met Ala Lys Ala Lys Met Lys Asn Lys Gln Leu Pro Thr Ala  
 50 55 60  
 Ala Pro  
 65

<210> 4851  
 <211> 246  
 <212> PRT  
 <213> Homo sapiens

<400> 4851  
 Met Ser Ala Glu Val Pro Glu Ala Ala Ser Ala Glu Glu Gln Lys Glu  
 1 5 10 15  
 Met Glu Asp Lys Val Thr Ser Pro Glu Lys Ala Glu Glu Ala Lys Leu  
 20 25 30  
 Lys Ala Arg Tyr Pro His Leu Gly Gln Lys Pro Gly Gly Ser Asp Phe  
 35 40 45  
 Leu Arg Lys Arg Leu Gln Lys Gly Gln Lys Tyr Phe Asp Ser Gly Asp  
 50 55 60  
 Tyr Asn Met Ala Lys Ala Lys Met Lys Asn Lys Gln Leu Pro Thr Ala  
 65 70 75 80  
 Ala Pro

<210> 4852  
 <211> 303  
 <212> PRT  
 <213> Homo sapiens

<400> 4852  
 Met Ser Ala Glu Val Pro Glu Ala Ala Ser Ala Glu Glu Gln Lys Ser  
 1 5 10 15  
 Glu His Asn Met Leu Pro Trp Ser Leu Gln Pro Ser Ile Pro Asn Ser  
 20 25 30  
 Leu Glu Glu Met Glu Asp Lys Val Thr Ser Pro Glu Lys Ala Glu Glu  
 35 40 45  
 Ala Lys Leu Lys Ala Arg Tyr Pro His Leu Gly Gln Lys Pro Gly Gly  
 50 55 60  
 Ser Asp Phe Leu Arg Lys Arg Leu Gln Lys Gly Gln Lys Tyr Phe Asp  
 65 70 75 80  
 Ser Gly Asp Tyr Asn Met Ala Lys Ala Lys Met Lys Asn Lys Gln Leu  
 85 90 95  
 Pro Thr Ala Ala Pro  
 100

<210> 4853  
 <211> 246  
 <212> PRT  
 <213> Homo sapiens



004220" 666E7560

<400> 4853

Met	Ser	Ala	Glu	Val	Pro	Glu	Ala	Ala	Ser	Ala	Glu	Glu	Gln	Lys	Glu
1				5					10					15	
Met	Glu	Asp	Lys	Val	Thr	Ser	Pro	Glu	Lys	Ala	Glu	Glu	Ala	Lys	Leu
		20						25					30		
Lys	Ala	Arg	Tyr	Pro	His	Leu	Gly	Gln	Lys	Pro	Gly	Gly	Ser	Asp	Phe
	35						40					45			
Leu	Arg	Lys	Arg	Leu	Gln	Lys	Gly	Gln	Lys	Tyr	Phe	Asp	Ser	Gly	Asp
	50				55						60				
Tyr	Asn	Met	Ala	Lys	Ala	Lys	Met	Lys	Asn	Lys	Gln	Leu	Pro	Thr	Ala
65					70					75					80
Ala	Pro														

<210> 4854

<211> 156

<212> PRT

<213> Homo sapiens

<400> 4854

Met	Ile	Lys	Arg	Val	Leu	Leu	Glu	Arg	Leu	Glu	Asn	Thr	Arg	Lys	Leu
1				5					10					15	
Arg	Glu	Leu	Thr	Glu	Gly	Arg	Thr	Leu	Asp	Trp	Pro	Gln	Asn	Arg	Ile
		20						25					30		
Thr	Glu	Val	Ser	Ala	Lys	Arg	Gln	Ile	Val	Thr	Glu	Tyr	Arg	Glu	Lys
	35						40					45			
Gly	Lys	Arg	Asn												
	50														

<210> 4855

<211> 294

<212> PRT

<213> Homo sapiens

<400> 4855

Met	Glu	Thr	Glu	Gln	Pro	Glu	Glu	Thr	Phe	Pro	Asn	Thr	Glu	Thr	Asn
1				5					10					15	
Gly	Glu	Phe	Gly	Lys	Arg	Pro	Ala	Glu	Asp	Met	Glu	Glu	Glu	Gln	Ala
		20						25					30		
Phe	Lys	Arg	Ser	Arg	Asn	Thr	Asp	Glu	Met	Val	Glu	Leu	Arg	Ile	Leu
	35						40					45			
Leu	Gln	Ser	Lys	Asn	Ala	Gly	Ala	Val	Ile	Gly	Lys	Gly	Gly	Lys	Asn
	50					55					60				
Ile	Lys	Ala	Leu	Arg	Thr	Asp	Tyr	Asn	Ala	Ser	Val	Ser	Val	Pro	Asp
65					70					75					80
Ser	Ser	Gly	Pro	Glu	Arg	Ile	Leu	Ser	Ile	Ser	Ala	Asp	Ile	Glu	Thr
				85					90					95	
Ile	Gly														

<210> 4856

<211> 306

<212> PRT

<213> Homo sapiens

&lt;400&gt; 4856

Met Glu Thr Glu Gln Pro Glu Glu Thr Phe Pro Asn Thr Glu Thr Asn  
 1 5 10 15  
 Gly Glu Phe Gly Lys Arg Pro Ala Glu Asp Met Glu Glu Glu Gln Ala  
 20 25 30  
 Phe Lys Arg Ser Arg Asn Thr Asp Glu Met Val Glu Leu Arg Ile Leu  
 35 40 45  
 Leu Gln Ser Lys Asn Ala Gly Ala Val Ile Gly Lys Gly Gly Lys Asn  
 50 55 60  
 Ile Lys Ala Leu Arg Thr Asp Tyr Asn Ala Ser Val Ser Val Gln Thr  
 65 70 75 80  
 Ala Val Ala Pro Lys Arg Ile Leu Ser Ile Ser Ala Asp Ile Glu Thr  
 85 90 95  
 Ile Gly Glu Ile Leu Lys  
 100

&lt;210&gt; 4857

&lt;211&gt; 432

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4857

Met Ala Glu Ala Ser Ser Ala Asn Leu Gly Ser Gly Cys Glu Glu Lys  
 1 5 10 15  
 Arg His Glu Gly Ser Ser Ser Glu Ser Val Pro Pro Gly Thr Thr Ile  
 20 25 30  
 Ser Arg Val Lys Leu Leu Asp Thr Met Val Asp Thr Phe Leu Gln Lys  
 35 40 45  
 Leu Val Ala Ala Gly Ser Tyr Gln Arg Phe Thr Asp Cys Tyr Lys Cys  
 50 55 60  
 Phe Tyr Gln Leu Gln Pro Ala Met Thr Gln Gln Ile Tyr Asp Lys Phe  
 65 70 75 80  
 Ile Ala Gln Leu Gln Thr Ser Ile Arg Glu Glu Ile Ser Asp Ile Lys  
 85 90 95  
 Glu Glu Gly Asn Leu Glu Ala Val Leu Asn Ala Leu Asp Lys Ile Val  
 100 105 110  
 Glu Glu Gly Lys Val Arg Lys Glu Pro Ala Trp Arg Pro Ser Gly Ile  
 115 120 125  
 Pro Glu Lys Asp Leu His Ser Val Met Ala Pro Thr Ser Cys Ser Asn  
 130 135 140

&lt;210&gt; 4858

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4858

Met Glu Gly Ala Lys Pro Thr Leu Gln Leu Val Tyr Gln Ala Val Gln  
 1 5 10 15  
 Ala Leu Tyr His Asp Pro Asp Pro Ser Gly Lys Glu Arg Ala Ser Phe  
 20 25 30  
 Trp Leu Gly Glu Leu Gln Arg Ser Val His Ala Trp Glu Ile Ser Asp  
 35 40 45  
 Gln Leu Leu Gln Ile Arg Gln Asp Val Glu Ser Cys Tyr Phe Ala

50

55

60

<210> 4859  
 <211> 246  
 <212> PRT  
 <213> Homo sapiens

<400> 4859  
 Met Pro Ser Glu Thr Leu Trp Glu Ile Ala Lys Ala Glu Val Glu Lys  
 1 5 10 15  
 Arg Gly Ile Asn Gly Ser Glu Gly Asp Gly Ala Glu Ile Ala Glu Lys  
 20 25 30  
 Phe Val Phe Phe Ile Gly Ser Lys Asn Gly Gly Lys Thr Thr Ile Ile  
 35 40 45  
 Leu Arg Cys Leu Asp Arg Asp Glu Pro Pro Lys Pro Thr Leu Ala Leu  
 50 55 60  
 Glu Tyr Thr Tyr Gly Arg Arg Ala Lys Gly His Asn Thr Pro Lys Asp  
 65 70 75 80  
 Ile Ala

<210> 4860  
 <211> 324  
 <212> PRT  
 <213> Homo sapiens

<400> 4860  
 Met Pro Pro Lys Lys Asp Val Pro Val Lys Lys Pro Ala Gly Pro Ser  
 1 5 10 15  
 Ile Ser Lys Pro Ala Ala Lys Pro Ala Ala Ala Gly Ala Pro Pro Ala  
 20 25 30  
 Lys Thr Lys Ala Glu Pro Ala Val Pro Gln Ala Pro Gln Lys Thr Gln  
 35 40 45  
 Glu Pro Pro Val Asp Leu Ser Lys Val Val Ile Glu Phe Asn Lys Asp  
 50 55 60  
 Gln Leu Glu Glu Leu Lys Ser Arg Arg Val Asp Phe Glu Thr Phe Leu  
 65 70 75 80  
 Pro Met Leu Gln Ala Val Ala Lys Asn Arg Gly Gln Gly Thr Tyr Glu  
 85 90 95  
 Asp Tyr Leu Glu Gly Phe Arg Val Phe Asp Lys Glu  
 100 105

<210> 4861  
 <211> 198  
 <212> PRT  
 <213> Homo sapiens

<400> 4861  
 Met Ala Pro Val Val Thr Gly Lys Phe Gly Glu Arg Pro Pro Pro Lys  
 1 5 10 15  
 Arg Leu Thr Arg Glu Ala Met Arg Asn Tyr Leu Lys Glu Arg Gly Asp  
 20 25 30  
 Gln Thr Val Leu Ile Leu His Ala Lys Val Ala Gln Lys Ser Tyr Gly  
 35 40 45  
 Asn Glu Lys Arg Phe Phe Cys Pro Pro Pro Cys Val Tyr Leu Met Gly

50  
Ser Ala  
65

55

60

<210> 4862  
<211> 375  
<212> PRT  
<213> Homo sapiens

<400> 4862  
Met Ala Asp Pro Trp Gln Glu Cys Met Asp Tyr Ala Val Thr Leu Ala  
1 5 10 15  
Arg Gln Ala Gly Glu Val Val Cys Glu Ala Ile Lys Asn Glu Met Asn  
20 25 30  
Val Met Leu Lys Ser Ser Pro Val Asp Leu Val Thr Ala Thr Asp Gln  
35 40 45  
Lys Val Glu Lys Met Leu Ile Ser Ser Ile Lys Glu Lys Tyr Pro Ser  
50 55 60  
His Ser Phe Ile Gly Glu Glu Ser Val Ala Ala Gly Glu Lys Ser Ile  
65 70 75 80  
Leu Thr Asp Asn Pro Thr Xaa Ile Ile Asp Pro Ile Asp Gly Thr Thr  
85 90 95  
Asn Phe Val His Arg Phe Pro Phe Val Ala Val Ser Ile Gly Phe Ala  
100 105 110  
Val Asn Lys Lys Ile Glu Phe Gly Val Val Tyr Ser Cys  
115 120 125

<210> 4863  
<211> 225  
<212> PRT  
<213> Homo sapiens

<400> 4863  
Met Gly Lys Ser Phe Ala Asn Phe Met Cys Lys Lys Asp Phe His Pro  
1 5 10 15  
Ala Ser Lys Ser Asn Ile Lys Lys Val Trp Met Ala Glu Gln Lys Ile  
20 25 30  
Ser Tyr Asp Lys Lys Lys Gln Glu Leu Met Gln Gln Tyr Leu Lys  
35 40 45  
Glu Gln Glu Ser Tyr Asp Asn Arg Leu Leu Met Gly Asp Glu Arg Val  
50 55 60  
Lys Asn Gly Leu Asn Phe Met Tyr Glu Ala Pro  
65 70 75

<210> 4864  
<211> 189  
<212> PRT  
<213> Homo sapiens

<400> 4864  
Met Leu Arg Ser Arg Ser Xaa Xaa Ser Leu Gln Lys Gln Pro Pro Cys  
1 5 10 15  
Gln Ser Leu Ser Ala Gln Lys Ser Arg Ser Pro Cys Gly Arg Gly Gly  
20 25 30

Thr Gly Arg Pro Arg Gly Thr Ala Cys Gly Ala Gly Ile Arg Cys Glu  
           35                          40                          45  
 Trp Arg Leu Leu Cys Gly Arg Val Glu Gly Gln Arg Glu Thr Arg  
       50                          55                          60

<210> 4865  
 <211> 297  
 <212> PRT  
 <213> Homo sapiens

<400> 4865  
 Met Ala Val Thr Leu Asp Lys Asp Ala Tyr Tyr Arg Arg Val Lys Arg  
 1                          5                          10                          15  
 Leu Tyr Ser Asn Trp Arg Lys Gly Glu Asp Glu Tyr Ala Asn Val Asp  
                           20                          25                          30  
 Ala Ile Val Val Ser Val Gly Val Asp Glu Glu Ile Val Tyr Ala Lys  
                           35                          40                          45  
 Ser Thr Ala Leu Gln Thr Trp Leu Phe Gly Tyr Glu Leu Thr Asp Thr  
       50                          55                          60  
 Ile Met Val Phe Cys Asp Asp Lys Ile Ile Phe Met Ala Ser Lys Lys  
 65                          70                          75                          80  
 Lys Val Glu Phe Leu Lys Gln Ile Ala Asn Thr Lys Gly Asn Glu Asn  
                           85                          90                          95  
 Ala Asn Gly

<210> 4866  
 <211> 342  
 <212> PRT  
 <213> Homo sapiens

<400> 4866  
 Met Gly Ser Asp Lys Arg Val Ser Arg Thr Glu Arg Ser Gly Arg Tyr  
 1                          5                          10                          15  
 Gly Ser Ile Ile Asp Arg Asp Asp Arg Asp Glu Arg Glu Ser Arg Ser  
                           20                          25                          30  
 Arg Arg Arg Asp Ser Asp Tyr Lys Arg Ser Ser Asp Asp Arg Arg Gly  
       35                          40                          45  
 Asp Arg Tyr Asp Asp Tyr Arg Asp Tyr Asp Ser Pro Glu Arg Glu Arg  
       50                          55                          60  
 Glu Arg Arg Asn Ser Asp Arg Ser Glu Asp Gly Tyr His Ser Asp Gly  
 65                          70                          75                          80  
 Asp Tyr Gly Glu His Asp Tyr Arg His Asp Ile Ser Asp Glu Arg Xaa  
                           85                          90                          95  
 Thr Arg Pro Ser Cys Cys Ala Ala Phe Pro Ser Xaa Ser Gln Arg Ala  
                           100                          105                          110  
 Ile Phe

<210> 4867  
 <211> 372  
 <212> PRT  
 <213> Homo sapiens

<400> 4867  
 Met Phe Pro Arg Val Ser Thr Phe Leu Pro Leu Arg Pro Leu Ser Arg

004220"666E560

```

1           5           10           15
His Pro Leu Ser Ser Gly Ser Pro Glu Thr Ser Ala Ala Ala Ile Met
                20                25                30
Leu Leu Thr Val Arg His Gly Thr Val Arg Tyr Arg Ser Ser Ala Leu
                35                40                45
Leu Ala Arg Thr Lys Asn Asn Ile Gln Arg Tyr Phe Gly Thr Asn Ser
                50                55                60
Val Ile Cys Ser Lys Lys Asp Lys Gln Ser Val Arg Thr Glu Glu Thr
65                70                75                80
Ser Lys Glu Thr Ser Glu Ser Gln Asp Ser Glu Lys Glu Asn Thr Lys
                85                90                95
Lys Asp Leu Leu Gly Ile Ile Lys Gly Met Lys Val Glu Leu Ser Thr
                100                105                110
Val Asn Val Arg Thr Thr Lys Pro Pro Lys Arg Arg
                115                120

```

<210> 4868  
 <211> 279  
 <212> PRT  
 <213> Homo sapiens

```

<400> 4868
Met Leu Leu Thr Val Arg His Gly Thr Val Arg Tyr Arg Ser Ser Ala
1           5           10           15
Leu Leu Ala Arg Thr Lys Asn Asn Ile Gln Arg Tyr Phe Gly Thr Asn
                20                25                30
Ser Val Ile Cys Ser Lys Lys Asp Lys Gln Ser Val Arg Thr Glu Glu
                35                40                45
Thr Ser Lys Glu Thr Ser Glu Ser Gln Asp Ser Glu Lys Glu Asn Thr
                50                55                60
Lys Lys Asp Leu Leu Gly Ile Ile Lys Gly Met Lys Val Glu Leu Ser
65                70                75                80
Thr Val Asn Val Arg Thr Thr Lys Pro Pro Lys Arg Arg
                85                90

```

<210> 4869  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

```

<400> 4869
Met Thr Val Leu Tyr Lys Ser Lys Asn Thr Cys Leu Pro Arg Ser Glu
1           5           10           15
Val Val Ala Leu Arg Asn Met Tyr Ile Leu Leu Ser Phe Gln His Phe
                20                25                30
Val Asn Val Asp Tyr Leu Lys Phe Leu Phe Arg Xaa Ala Ile Asn Ile
                35                40                45
Leu Leu Asp Ser Glu
                50

```

<210> 4870  
 <211> 210  
 <212> PRT  
 <213> Homo sapiens

004220"666T550

<400> 4870

Met Glu Lys Phe Asn Leu Asp Leu Ser Thr Val Thr Gln Ala Phe Leu  
 1 5 10 15  
 Lys Asn Ser Gly Glu Leu Glu Ala Thr Ser Ala Phe Leu Ala Ser Gly  
 20 25 30  
 Gln Arg Ala Asp Gly Tyr Pro Ile Trp Ser Arg Gln Asp Asp Ile Asp  
 35 40 45  
 Leu Gln Lys Asp Asp Glu Asp Thr Arg Glu Ala Leu Val Lys Lys Phe  
 50 55 60  
 Gly Ala Gln Asn Val Ala  
 65 70

<210> 4871

<211> 258

<212> PRT

<213> Homo sapiens

<400> 4871

Met Ala Ala Leu Gly Pro Ser Ser Gln Asn Val Thr Glu Tyr Val Val  
 1 5 10 15  
 Arg Val Pro Lys Asn Thr Thr Lys Lys Tyr Asn Ile Met Ala Phe Asn  
 20 25 30  
 Ala Ala Asp Lys Val Asn Phe Ala Thr Trp Asn Gln Ala Arg Leu Glu  
 35 40 45  
 Arg Asp Leu Ser Asn Lys Xaa Xaa Thr Lys Arg Arg Arg Cys Pro Asn  
 50 55 60  
 Arg Ala Arg Ala Val Ser Ser Thr Ala Ser Phe Gly Arg Arg Leu Gly  
 65 70 75 80  
 Gly Arg Ser Thr Ala Ser  
 85

<210> 4872

<211> 282

<212> PRT

<213> Homo sapiens

<400> 4872

Met Ser Gly Ser Val Leu Phe Thr Ala Gly Glu Arg Trp Arg Cys Phe  
 1 5 10 15  
 Leu Thr Pro Ser Arg Ser Ser Leu Tyr Trp Ala Leu His Asn Phe Cys  
 20 25 30  
 Cys Arg Lys Lys Ser Thr Thr Pro Lys Lys Ile Thr Pro Asn Val Thr  
 35 40 45  
 Phe Cys Asp Glu Asn Ala Lys Glu Pro Glu Asn Ala Leu Asp Lys Leu  
 50 55 60  
 Phe Ser Ser Glu Gln Gln Ala Ser Ile Leu His Val Leu Asn Thr Ala  
 65 70 75 80  
 Ser Thr Lys Glu Leu Glu Ala Phe Arg Leu Leu Arg Gly Arg  
 85 90

<210> 4873

<211> 156

<212> PRT

<213> Homo sapiens

<400> 4873

Met Arg Asp Ser Ala Glu Gly Pro Lys Glu Asp Glu Glu Lys Pro Ser  
1 5 10 15  
Ala Ser Ala Leu Glu Gln Pro Ala Thr Leu Gln Glu Val Ala Ser Gln  
20 25 30  
Glu Val Pro Pro Glu Leu Ala Thr Pro Ala Pro Ala Trp Glu Pro Gln  
35 40 45  
Pro Glu Pro Asp  
50

<210> 4874

<211> 405

<212> PRT

<213> Homo sapiens

<400> 4874

Met Lys Cys Val Phe Val Thr Val Gly Thr Thr Ser Phe Asp Asp Leu  
1 5 10 15  
Ile Ala Cys Val Ser Ala Pro Asp Ser Leu Gln Lys Ile Glu Ser Leu  
20 25 30  
Gly Tyr Asn Arg Leu Ile Leu Gln Ile Gly Arg Gly Thr Val Val Pro  
35 40 45  
Glu Pro Phe Ser Thr Glu Ser Phe Thr Leu Asp Val Tyr Arg Tyr Lys  
50 55 60  
Asp Ser Leu Lys Glu Asp Ile Gln Lys Ala Asp Leu Val Ile Ser His  
65 70 75 80  
Ala Gly Ala Gly Ser Cys Leu Glu Thr Leu Glu Lys Gly Lys Pro Leu  
85 90 95  
Val Val Val Ile Asn Glu Lys Leu Met Asn Asn His Gln Leu Glu Leu  
100 105 110  
Ala Lys Gln Leu His Lys Glu Gly His Leu Phe Tyr Cys Thr Cys Ser  
115 120 125  
Thr Leu Pro Gly Leu Leu Gln  
130 135

<210> 4875

<211> 279

<212> PRT

<213> Homo sapiens

<400> 4875

Met Ala Pro Ala Lys Lys Gly Gly Glu Lys Lys Lys Gly Arg Ser Ala  
1 5 10 15  
Ile Asn Glu Val Xaa Thr Arg Glu Tyr Thr Ile Asn Ile His Lys Arg  
20 25 30  
Ile His Gly Val Gly Phe Lys Lys Arg Ala Pro Arg Ala Leu Lys Glu  
35 40 45  
Ile Arg Lys Phe Ala Met Lys Glu Met Gly Thr Pro Asp Val Arg Ile  
50 55 60  
Asp Thr Arg Leu Asn Lys Ala Val Trp Ala Lys Gly Ile Arg Cys Xaa  
65 70 75 80  
Ser Tyr Leu Tyr Ser Xaa Val Asn Phe Cys Xaa Asp Thr



<210> 4876  
 <211> 336  
 <212> PRT  
 <213> Homo sapiens

<400> 4876  
 Met Ala Pro Ala Lys Lys Gly Gly Glu Lys Lys Lys Gly Arg Ser Ala  
 1 5 10 15  
 Ile Asn Glu Val Val Thr Arg Glu Tyr Thr Ile Asn Ile His Lys Arg  
 20 25 30  
 Ile His Gly Val Gly Phe Lys Lys Arg Ala Pro Arg Ala Leu Lys Glu  
 35 40 45  
 Ile Arg Lys Phe Ala Met Lys Glu Met Gly Thr Pro Asp Val Arg Ile  
 50 55 60  
 Asp Thr Arg Leu Asn Lys Ala Val Trp Ala Lys Gly Ile Arg Asn Val  
 65 70 75 80  
 Pro Tyr Arg Ile Arg Val Arg Leu Ser Arg Lys Arg Asn Glu Asp Glu  
 85 90 95  
 Asp Ser Pro Asn Lys Leu Tyr Thr Leu Xaa Thr Tyr Thr Val Asn Val  
 100 105 110

<210> 4877  
 <211> 324  
 <212> PRT  
 <213> Homo sapiens

<400> 4877  
 Met Trp Val Ser Ser Phe Ala Arg Val Gln Gly Lys Ser Gly Glu Gly  
 1 5 10 15  
 Ile Val Ser Ile Ile Lys Ser Val Gly Ala Val Gly Gly Thr Asn Ala  
 20 25 30  
 Pro Thr Thr Glu Ala Gly Arg Lys Leu Ser Gly Gly Ala Arg Ala Gln  
 35 40 45  
 Arg Arg Pro Glu Leu Pro Lys Gln Arg Gly Phe Gly Asp Gly Gly Phe  
 50 55 60  
 Val Arg Arg Asn Thr Lys Ser Arg Ala Trp Trp Gly Ile Phe Asp Ile  
 65 70 75 80  
 Leu Arg Xaa Glu Leu Gln Glu Leu Met Lys Gln Ile Asp Ile Met Val  
 85 90 95  
 Ala His Lys Lys Ser Glu Trp Glu Gly Arg Tyr Thr  
 100 105

<210> 4878  
 <211> 303  
 <212> PRT  
 <213> Homo sapiens

<400> 4878  
 Met Ser Gly Lys Asp Arg Ile Glu Ile Phe Pro Ser Arg Met Ala Gln  
 1 5 10 15  
 Thr Ile Met Lys Ala Arg Leu Lys Gly Ala Gln Thr Gly Arg Asn Leu  
 20 25 30

004220" 666E7560

Leu Lys Lys Lys Ser Asp Ala Leu Thr Leu Arg Phe Arg Gln Ile Leu  
 35 40 45  
 Lys Lys Ile Ile Glu Thr Lys Met Leu Met Gly Glu Val Met Arg Glu  
 50 55 60  
 Ala Ala Phe Ser Leu Ala Glu Ala Lys Phe Thr Ala Gly Asp Phe Ser  
 65 70 75 80  
 Thr Thr Val Ile Gln Asn Val Asn Lys Ala Gln Val Lys Ile Arg Ala  
 85 90 95  
 Lys Lys Asp Asn Val  
 100

<210> 4879  
 <211> 192  
 <212> PRT  
 <213> Homo sapiens

<400> 4879  
 Met Val Leu Trp Lys Val Val Phe Asn Arg Asp Lys Gln Gly Glu Tyr  
 1 5 10 15  
 Arg Phe Ser Thr Thr Gln Pro Pro Gln Glu Ser Val Asp Arg Trp Gly  
 20 25 30  
 Lys Cys Cys Leu Pro Trp Ala Leu Gly Cys Arg Lys Lys Thr Pro Lys  
 35 40 45  
 Ala Lys Tyr Met Tyr Leu Ala Gln Glu Leu Leu Val Asp Pro Glu Trp  
 50 55 60

<210> 4880  
 <211> 273  
 <212> PRT  
 <213> Homo sapiens

<400> 4880  
 Met Thr Ala Ala Glu Asn Val Cys Tyr Thr Leu Ile Asn Val Pro Met  
 1 5 10 15  
 Asp Ser Glu Pro Pro Ser Glu Ile Ser Leu Lys Asn Asp Leu Glu Lys  
 20 25 30  
 Gly Asp Val Lys Ser Lys Thr Glu Ala Leu Lys Lys Val Ile Ile Met  
 35 40 45  
 Ile Leu Asn Gly Glu Lys Leu Pro Gly Leu Leu Met Thr Ile Ile Arg  
 50 55 60  
 Phe Val Leu Pro Leu Gln Asp His Thr Ile Lys Lys Leu Leu Leu Xaa  
 65 70 75 80  
 Phe Trp Glu Ile Val Pro Lys Thr Thr Pro Asp  
 85 90

<210> 4881  
 <211> 273  
 <212> PRT  
 <213> Homo sapiens

<400> 4881  
 Met Thr Ala Ala Glu Asn Val Cys Tyr Thr Leu Ile Asn Val Pro Met  
 1 5 10 15  
 Asp Ser Glu Pro Pro Ser Glu Ile Ser Leu Lys Asn Asp Leu Glu Lys

004220"666E560

			20					25				30			
Gly	Asp	Val	Lys	Ser	Lys	Thr	Glu	Ala	Leu	Lys	Lys	Val	Ile	Ile	Met
		35					40					45			
Ile	Leu	Asn	Gly	Glu	Lys	Leu	Pro	Gly	Leu	Leu	Met	Thr	Ile	Ile	Arg
		50				55					60				
Phe	Val	Leu	Pro	Leu	Gln	Asp	His	Thr	Ile	Lys	Lys	Leu	Leu	Leu	Xaa
65					70					75					80
Phe	Trp	Glu	Ile	Val	Pro	Lys	Thr	Thr	Pro	Asp					
				85					90						

<210> 4882

<211> 375

<212> PRT

<213> Homo sapiens

<400> 4882

Met	Gln	Leu	Thr	His	Gln	Leu	Asp	Leu	Phe	Pro	Glu	Cys	Arg	Val	Thr
1				5					10					15	
Leu	Leu	Leu	Phe	Lys	Asp	Val	Lys	Asn	Ala	Gly	Asp	Leu	Arg	Arg	Lys
			20					25					30		
Ala	Met	Glu	Gly	Thr	Ile	Asp	Gly	Ser	Leu	Ile	Asn	Pro	Thr	Val	Ile
		35				40					45				
Val	Asp	Pro	Phe	Gln	Ile	Leu	Val	Ala	Ala	Asn	Lys	Ala	Val	His	Leu
	50					55					60				
Tyr	Lys	Leu	Gly	Lys	Met	Lys	Thr	Arg	Thr	Leu	Ser	Thr	Glu	Ile	Ile
65					70					75					80
Phe	Asn	Leu	Ser	Pro	Asn	Asn	Asn	Ile	Ser	Glu	Ala	Leu	Lys	Lys	Phe
				85					90					95	
Gly	Ile	Ser	Ala	Asn	Asp	Thr	Ser	Ile	Leu	Ile	Val	Tyr	Ile	Glu	Glu
			100					105					110		
Gly	Glu	Lys	Gln	Ile	Asn	Gln	Glu	Tyr	Leu	Ile	Ser	Gln			
		115					120					125			

<210> 4883

<211> 339

<212> PRT

<213> Homo sapiens

<400> 4883

Met	Glu	Thr	Ala	Pro	Lys	Pro	Gly	Lys	Asp	Val	Pro	Pro	Lys	Lys	Asp
1				5					10					15	
Lys	Leu	Gln	Thr	Lys	Arg	Lys	Lys	Pro	Arg	Arg	Tyr	Trp	Glu	Glu	Glu
			20					25					30		
Thr	Val	Pro	Thr	Thr	Ala	Gly	Ala	Ser	Pro	Gly	Pro	Pro	Arg	Asn	Lys
		35				40						45			
Lys	Asn	Arg	Glu	Leu	Arg	Pro	Gln	Arg	Pro	Lys	Asn	Ala	Tyr	Ile	Leu
	50					55					60				
Lys	Lys	Ser	Arg	Ile	Ser	Lys	Lys	Pro	Gln	Val	Pro	Lys	Lys	Pro	Arg
65					70					75					80
Glu	Trp	Lys	Asn	Pro	Glu	Ser	Gln	Arg	Gly	Leu	Ser	Gly	Ala	Gln	Asp
			85					90						95	
Pro	Phe	Pro	Gly	Pro	Xaa	Pro	Val	Pro	Val	Glu	Val	Val	Gln	Lys	Phe
			100					105					110		

Cys

<210> 4884  
 <211> 330  
 <212> PRT  
 <213> Homo sapiens

<400> 4884  
 Met Asp Ser Val Ala Phe Glu Asp Val Asp Val Asn Phe Thr Gln Glu  
 1 5 10 15  
 Glu Trp Ala Leu Leu Asp Pro Ser Gln Lys Asn Leu Tyr Arg Asp Val  
 20 25 30  
 Met Trp Glu Thr Met Arg Asn Leu Ala Ser Ile Gly Lys Lys Trp Lys  
 35 40 45  
 Asp Gln Asn Ile Lys Asp His Tyr Lys His Arg Gly Arg Asn Leu Arg  
 50 55 60  
 Ser His Met Leu Glu Arg Leu Tyr Gln Xaa Lys Asp Gly Ser Gln Arg  
 65 70 75 80  
 Gly Gly Ile Phe Ser Gln Phe Ala Asn Gln Asn Leu Ser Lys Lys Ile  
 85 90 95  
 Pro Gly Val Lys Leu Cys Glu Ser Ile Val Tyr Gly Glu Val  
 100 105 110

<210> 4885  
 <211> 330  
 <212> PRT  
 <213> Homo sapiens

<400> 4885  
 Met Asp Ser Val Xaa Phe Glu Asp Val Asp Val Asn Phe Thr Gln Glu  
 1 5 10 15  
 Glu Trp Ala Leu Leu Asp Pro Ser Gln Lys Asn Leu Tyr Arg Asp Val  
 20 25 30  
 Met Trp Glu Thr Met Arg Asn Leu Ala Ser Ile Gly Lys Lys Trp Lys  
 35 40 45  
 Asp Gln Asn Ile Lys Asp His Tyr Lys His Arg Gly Arg Asn Leu Arg  
 50 55 60  
 Ser His Met Leu Glu Arg Leu Tyr Gln Xaa Lys Asp Gly Ser Gln Arg  
 65 70 75 80  
 Gly Gly Ile Phe Ser Gln Phe Ala Asn Gln Asn Leu Ser Lys Lys Ile  
 85 90 95  
 Pro Gly Val Lys Leu Cys Glu Ser Ile Val Tyr Gly Glu Val  
 100 105 110

<210> 4886  
 <211> 330  
 <212> PRT  
 <213> Homo sapiens

<400> 4886  
 Met Asp Ser Val Ala Phe Glu Asp Val Xaa Val Asn Phe Thr Xaa Glu  
 1 5 10 15  
 Glu Trp Ala Leu Leu Xaa Pro Ser Gln Lys Asn Leu Tyr Arg Asp Val  
 20 25 30  
 Met Trp Glu Thr Met Arg Asn Leu Ala Ser Ile Gly Lys Lys Trp Lys



004220-666T560

Glu Ser Gln Glu Met Asp Pro Val Ala Phe Asp Asp Val Ala Val Asn  
 20 25 30  
 Phe Thr Gln Glu Glu Trp Ala Leu Leu Asp Ile Ser Gln Arg Lys Leu  
 35 40 45  
 Tyr Lys Glu Val Met Leu Glu Thr Phe Arg Asn Leu Thr Ser Val Gly  
 50 55 60  
 Lys Ser Trp Lys Asp Gln Asn Ile Glu Tyr Glu Tyr Gln  
 65 70 75

<210> 4890  
 <211> 327  
 <212> PRT  
 <213> Homo sapiens

<400> 4890  
 Met Ala Arg Gly Ser Val Ser Asp Glu Glu Met Met Glu Leu Arg Glu  
 1 5 10 15  
 Ala Phe Ala Lys Val Asp Thr Asp Gly Asn Gly Tyr Ile Ser Phe Asn  
 20 25 30  
 Glu Leu Asn Asp Leu Phe Lys Ala Ala Cys Leu Pro Leu Pro Gly Tyr  
 35 40 45  
 Arg Val Arg Xaa Ile Thr Glu Asn Leu Met Ala Thr Gly Asp Leu Asp  
 50 55 60  
 Gln Asp Gly Arg Ile Ser Phe Asp Glu Phe Ile Xaa Ile Phe His Gly  
 65 70 75 80  
 Leu Lys Ser Thr Asp Val Ala Lys Thr Phe Arg Xaa Ala Ile Asn Lys  
 85 90 95  
 Lys Xaa Gly Ile Cys Ala Ile Gly Gly Thr Ser Glu Gln  
 100 105

<210> 4891  
 <211> 333  
 <212> PRT  
 <213> Homo sapiens

<400> 4891  
 Met Ala Ser Asn Lys Thr Thr Leu Gln Lys Met Gly Lys Lys Gln Asn  
 1 5 10 15  
 Gly Lys Ser Lys Lys Val Glu Glu Ala Glu Pro Glu Glu Phe Val Val  
 20 25 30  
 Glu Lys Val Leu Asp Arg Arg Val Asn Gly Lys Val Glu Tyr Phe  
 35 40 45  
 Leu Lys Trp Lys Gly Phe Thr Asp Ala Asp Asn Thr Trp Glu Pro Glu  
 50 55 60  
 Glu Asn Leu Asp Cys Pro Glu Leu Ile Glu Ala Phe Leu Asn Ser Gln  
 65 70 75 80  
 Lys Ala Gly Lys Glu Lys Asp Gly Thr Lys Arg Lys Ser Leu Ser Asp  
 85 90 95  
 Ser Glu Ser Asp Asp Ser Lys Ser Lys Lys Lys Arg Asp Ala Ala  
 100 105 110

<210> 4892  
 <211> 372  
 <212> PRT

<213> Homo sapiens

<400> 4892

Met Ser Ala Arg Lys Ser Ser Asp Ala Ser Ala Cys Ser Ser Ser Glu  
1 5 10 15  
Ile Ser Val Lys Glu Phe Leu Ala Lys Ala Lys Glu Asp Phe Leu Lys  
20 25 30  
Lys Trp Glu Asn Pro Thr Gln Asn Asn Ala Gly Leu Glu Asp Phe Glu  
35 40 45  
Arg Lys Lys Thr Leu Gly Thr Gly Ser Phe Gly Arg Val Met Leu Val  
50 55 60  
Lys His Lys Ala Thr Xaa Xaa Tyr Tyr Ala Met Lys Ile Leu Asp Lys  
65 70 75 80  
Gln Lys Val Val Lys Leu Lys Gln Ile Glu His Thr Leu Asn Glu Lys  
85 90 95  
Arg Ile Leu Gln Ala Val Asn Phe Pro Phe Leu Val Arg Leu Glu Tyr  
100 105 110  
Ala Phe Lys Asp Asn Ser Asn Xaa Tyr Met Val Met  
115 120

<210> 4893

<211> 204

<212> PRT

<213> Homo sapiens

<400> 4893

Met Gly Leu Ser Arg Lys Ser Ser Asp Ala Ser Ala Cys Ser Ser Ser  
1 5 10 15  
Glu Ile Ser Val Lys Glu Phe Leu Ala Lys Ala Lys Glu Asp Phe Leu  
20 25 30  
Lys Lys Trp Glu Asn Pro Thr Gln Asn Asn Ala Gly Leu Glu Asp Phe  
35 40 45  
Glu Arg Lys Lys Thr Leu Gly Thr Gly Ser Phe Gly Arg Val Met Leu  
50 55 60  
Val Lys His Lys  
65

<210> 4894

<211> 261

<212> PRT

<213> Homo sapiens

<400> 4894

Met Asn Thr Val Gly Thr Trp Arg Leu Leu Gln Xaa Asn Arg Ala Ala  
1 5 10 15  
Thr Gly Lys Met Glu Met Glu Met Glu Gln Val Phe Glu Met Lys Val  
20 25 30  
Lys Glu Lys Val Gln Lys Leu Lys Asp Ser Glu Ala Glu Leu Gln Arg  
35 40 45  
Arg His Glu Gln Met Lys Lys Asn Leu Glu Ala Gln His Lys Glu Leu  
50 55 60  
Glu Glu Lys Arg Arg Gln Xaa Glu Asp Glu Lys Ala Asn Trp Glu Ala  
65 70 75 80  
Gln Gln Arg Ile Leu Glu Gln

<400> 4895

<210> 4896

<400> 4896

2944



115

<210> 4897  
 <211> 447  
 <212> PRT  
 <213> Homo sapiens

<400> 4897

Met	Ala	Ala	Ser	Met	Phe	Tyr	Gly	Arg	Leu	Val	Ala	Val	Ala	Thr	Leu
1				5					10					15	
Arg	Asn	His	Arg	Pro	Arg	Thr	Ala	Gln	Arg	Ala	Ala	Ala	Gln	Val	Leu
			20					25					30		
Gly	Ser	Ser	Gly	Leu	Phe	Asn	Asn	His	Gly	Leu	Gln	Val	Gln	Gln	Gln
		35					40					45			
Gln	Gln	Arg	Asn	Leu	Ser	Leu	His	Glu	Tyr	Met	Ser	Met	Glu	Leu	Leu
		50				55					60				
Gln	Glu	Ala	Gly	Val	Ser	Val	Pro	Lys	Gly	Tyr	Val	Ala	Lys	Ser	Pro
65					70					75					80
Asp	Glu	Ala	Tyr	Ala	Ile	Ala	Lys	Lys	Leu	Gly	Ser	Lys	Asp	Val	Val
				85					90					95	
Ile	Lys	Ala	Gln	Val	Leu	Ala	Gly	Gly	Arg	Gly	Lys	Gly	Thr	Phe	Glu
			100					105					110		
Ser	Gly	Leu	Lys	Gly	Gly	Val	Lys	Ile	Val	Phe	Ser	Pro	Glu	Glu	Ala
		115					120					125			
Lys	Ala	Val	Ser	Ser	Gln	Met	Ile	Gly	Lys	Lys	Leu	Phe	Thr	Lys	Gln
		130				135						140			
Thr	Gly	Glu	Arg	Ala											
145															

<210> 4898  
 <211> 342  
 <212> PRT  
 <213> Homo sapiens

<400> 4898

Met	Ala	Thr	Ala	Glu	Val	Leu	Asn	Ile	Gly	Lys	Lys	Leu	Tyr	Glu	Gly
1				5					10					15	
Lys	Thr	Lys	Glu	Val	Tyr	Glu	Leu	Leu	Asp	Ser	Pro	Gly	Lys	Val	Leu
			20					25					30		
Leu	Gln	Ser	Lys	Asp	Gln	Ile	Thr	Ala	Gly	Asn	Ala	Ala	Arg	Lys	Asn
			35				40					45			
His	Leu	Glu	Gly	Lys	Ala	Ala	Ile	Ser	Asn	Lys	Ile	Thr	Ser	Cys	Ile
		50				55					60				
Phe	Gln	Leu	Leu	Gln	Glu	Ala	Gly	Ile	Lys	Thr	Ala	Phe	Thr	Arg	Lys
65					70					75					80
Cys	Gly	Glu	Thr	Xaa	Phe	Ile	Ala	Pro	Gln	Cys	Glu	Met	Ile	Pro	Ile
				85				90					95		
Glu	Trp	Val	Cys	Arg	Arg	Ile	Ala	Thr	Gly	Ser	Phe	Leu	Lys	Arg	Asn
			100					105					110		
Pro	Gly														

<210> 4899  
 <211> 339  
 <212> PRT

004220" 656ET560

<213> Homo sapiens

<400> 4899

Met Arg Asn Ser Tyr Arg Phe Leu Ala Ser Ser Leu Ser Val Val Val  
1 5 10 15  
Ser Leu Leu Leu Ile Pro Glu Asp Val Cys Glu Lys Ile Ile Gly Gly  
20 25 30  
Asn Glu Val Thr Pro His Ser Arg Pro Tyr Met Val Leu Leu Ser Leu  
35 40 45  
Asp Arg Lys Thr Ile Cys Ala Gly Ala Leu Ile Ala Lys Asp Trp Val  
50 55 60  
Leu Thr Ala Ala His Cys Asn Leu Asn Lys Arg Ser Gln Val Ile Leu  
65 70 75 80  
Gly Ala His Ser Ile Thr Arg Glu Glu Pro Thr Lys Gln Ile Met Leu  
85 90 95  
Val Lys Lys Glu Phe Pro Tyr Pro Cys Tyr Asp Pro Ala Thr Arg Glu  
100 105 110  
Gly

<210> 4900

<211> 279

<212> PRT

<213> Homo sapiens

<400> 4900

Met Lys Val Gly Tyr Glu Arg Asp Phe Leu Arg Tyr Leu Gln Ser Leu  
1 5 10 15  
Leu Ala Glu Val Glu Arg Arg Ile Arg Arg Val His Ala Arg Leu Ala  
20 25 30  
Leu Ser Gln Asn Gln Gln Ser Ser Gly Ala Ala Gly Xaa Thr Gly Lys  
35 40 45  
Asn Glu Glu Lys Ile Gln Val Leu Thr Asp Lys Ile Asp Val Leu Leu  
50 55 60  
Gln Gln Ile Glu Glu Leu Gly Ser Glu Gly Lys Val Glu Glu Ala Gln  
65 70 75 80  
Gly Met Met Lys Leu Val Glu Gln Leu Lys Glu Glu Arg  
85 90

<210> 4901

<211> 198

<212> PRT

<213> Homo sapiens

<400> 4901

Met Ile Ser Ala Ala Gln Leu Leu Asp Glu Leu Met Gly Arg Asp Arg  
1 5 10 15  
Asn Leu Ala Pro Asp Glu Lys Arg Xaa Thr Cys Gly Gly Thr Thr Arg  
20 25 30  
Ala Phe Val Asn Ile Ile Ser Val Val Xaa Val Leu Arg Xaa Cys Ser  
35 40 45  
Gln Ile His Val Leu Ile Leu Met Tyr Leu Glu Glu Glu Ile Asn Ile  
50 55 60  
Arg Asp  
65

<210> 4902  
 <211> 204  
 <212> PRT  
 <213> Homo sapiens

<400> 4902  
 Met Ser Ala Gln Ser Val Glu Glu Asp Ser Ile Leu Ile Ile Pro Thr  
 1 5 10 15  
 Pro Asp Glu Glu Lys Ile Leu Arg Val Lys Leu Glu Glu Asp Pro  
 20 25 30  
 Asp Gly Glu Glu Gly Ser Ser Ile Pro Trp Asn His Leu Pro Asp Pro  
 35 40 45  
 Glu Ile Phe Arg Gln Arg Phe Arg Gln Phe Gly Tyr Gln Asp Ser Xaa  
 50 55 60  
 Gly Pro Arg Glu  
 65

<210> 4903  
 <211> 411  
 <212> PRT  
 <213> Homo sapiens

<400> 4903  
 Met Ala Ala Ser Arg Arg Leu Met Lys Glu Leu Glu Glu Ile Arg Lys  
 1 5 10 15  
 Cys Gly Met Lys Asn Phe Arg Asn Ile Gln Val Asp Glu Ala Asn Leu  
 20 25 30  
 Leu Thr Trp Gln Gly Leu Ile Val Pro Asp Asn Pro Pro Tyr Asp Lys  
 35 40 45  
 Gly Ala Phe Arg Ile Glu Ile Asn Phe Pro Ala Glu Tyr Pro Phe Lys  
 50 55 60  
 Pro Pro Lys Ile Thr Phe Lys Thr Lys Ile Tyr His Pro Asn Ile Asp  
 65 70 75 80  
 Glu Lys Ala Xaa Val Cys Leu Pro Val Ile Ser Ala Glu Asn Trp Lys  
 85 90 95  
 Pro Ala Thr Lys Thr Asp Gln Gly Lys Thr Cys Ala Cys Val Phe Leu  
 100 105 110  
 Gly Arg Gly Leu Trp Gly Cys Cys Ser Gly Val Gly Ala Ser Gly Thr  
 115 120 125  
 Arg Ser Asp Arg Ile Gln Arg Ile Phe  
 130 135

<210> 4904  
 <211> 240  
 <212> PRT  
 <213> Homo sapiens

<400> 4904  
 Met Ser Val Lys Met Gly Lys Lys Tyr Lys Asn Ile Val Leu Leu Lys  
 1 5 10 15  
 Gly Leu Glu Val Ile Asn Asp Tyr His Phe Arg Met Val Lys Ser Leu  
 20 25 30  
 Leu Ser Asn Asp Leu Lys Leu Asn Leu Lys Met Arg Glu Glu Tyr Asp

	35					40					45								
Lys	Ile	Gln	Ile	Ala	Asp	Leu	Met	Glu	Glu	Lys	Phe	Arg	Gly	Asp	Ala				
	50					55					60								
Gly	Leu	Gly	Lys	Leu	Ile	Lys	Ile	Phe	Glu	Asp	Ile	Pro	Thr	Leu	Glu				
65					70					75					80				

<210> 4905  
 <211> 240  
 <212> PRT  
 <213> Homo sapiens

<400> 4905  
 Met Ser Val Lys Met Gly Lys Lys Tyr Lys Asn Ile Val Leu Leu Lys  
 1 5 10 15  
 Gly Leu Glu Val Ile Asn Asp Tyr His Phe Arg Met Val Lys Ser Leu  
 20 25 30  
 Leu Ser Asn Asp Leu Lys Leu Asn Leu Lys Met Arg Glu Glu Tyr Asp  
 35 40 45  
 Lys Ile Gln Ile Ala Asp Leu Met Glu Glu Lys Phe Arg Gly Asp Ala  
 50 55 60  
 Gly Leu Gly Lys Leu Ile Lys Ile Phe Glu Asp Ile Pro Thr Leu Glu  
 65 70 75 80

<210> 4906  
 <211> 240  
 <212> PRT  
 <213> Homo sapiens

<400> 4906  
 Met Ser Val Lys Met Gly Lys Lys Tyr Lys Asn Ile Val Leu Leu Lys  
 1 5 10 15  
 Gly Leu Glu Val Ile Asn Asp Tyr His Phe Arg Met Val Lys Ser Leu  
 20 25 30  
 Leu Ser Asn Asp Leu Lys Leu Asn Leu Lys Met Arg Glu Glu Tyr Asp  
 35 40 45  
 Lys Ile Gln Ile Ala Asp Leu Met Glu Glu Lys Phe Arg Gly Asp Ala  
 50 55 60  
 Gly Leu Gly Lys Leu Ile Lys Ile Phe Glu Asp Ile Pro Thr Leu Glu  
 65 70 75 80

<210> 4907  
 <211> 273  
 <212> PRT  
 <213> Homo sapiens

<400> 4907  
 Met Met Glu Tyr Leu Lys Ile Ala Gln Asp Leu Glu Met Tyr Gly Val  
 1 5 10 15  
 Asn Tyr Phe Glu Ile Lys Asn Lys Lys Gly Thr Glu Leu Trp Leu Gly  
 20 25 30  
 Val Asp Ala Leu Gly Leu Asn Ile Tyr Glu His Asp Asp Lys Leu Thr  
 35 40 45  
 Pro Lys Ile Gly Phe Pro Trp Ser Glu Ile Arg Asn Ile Ser Phe Asn  
 50 55 60

Asp Lys Lys Phe Val Ile Lys Pro Ile Asp Lys Lys Ala Pro Asp Phe  
 65 70 75 80  
 Val Phe Tyr Ala Pro Arg Leu Arg Ile Asn Lys  
 85 90

<210> 4908  
 <211> 306  
 <212> PRT  
 <213> Homo sapiens

<400> 4908  
 Met Thr Thr Ala Thr Arg Gln Glu Val Leu Gly Leu Tyr Arg Ser Ile  
 1 5 10 15  
 Phe Arg Leu Ala Arg Lys Trp Gln Ala Thr Ser Gly Gln Met Glu Asp  
 20 25 30  
 Thr Ile Lys Glu Lys Gln Tyr Ile Leu Asn Glu Ala Arg Thr Leu Phe  
 35 40 45  
 Arg Lys Asn Lys Asn Leu Thr Asp Thr Asp Leu Ile Lys Gln Cys Ile  
 50 55 60  
 Asp Glu Cys Thr Ala Arg Ile Xaa Ile Gly Leu His Tyr Lys Ile Pro  
 65 70 75 80  
 Tyr Pro Xaa Pro Ile His Leu Pro Pro Met Gly Leu Thr Pro Leu Arg  
 85 90 95  
 Gly Arg Gly Leu Arg Ser  
 100

<210> 4909  
 <211> 309  
 <212> PRT  
 <213> Homo sapiens

<400> 4909  
 Met Ser Ala Thr Val Val Asp Ala Val Asn Ala Ala Pro Leu Ser Gly  
 1 5 10 15  
 Ser Lys Glu Met Ser Leu Glu Glu Pro Lys Lys Met Thr Arg Glu Asp  
 20 25 30  
 Trp Arg Lys Lys Lys Glu Leu Glu Gln Arg Lys Leu Gly Asn Ala  
 35 40 45  
 Pro Ala Glu Val Asp Glu Glu Gly Lys Asp Ile Asn Pro His Ile Pro  
 50 55 60  
 Gln Tyr Ile Ser Ser Val Pro Trp Tyr Ile Asp Pro Ser Lys Arg Pro  
 65 70 75 80  
 Thr Leu Lys His Gln Arg Pro Gln Pro Glu Lys Gln Lys Gln Phe Ser  
 85 90 95  
 Ser Ser Gly Glu Trp Tyr Lys  
 100

<210> 4910  
 <211> 252  
 <212> PRT  
 <213> Homo sapiens

<400> 4910  
 Met Phe Thr Arg Trp Lys Gln Gln Gln Arg Lys Glu Lys Leu Ala Ala

004220" 666E7560

1                    5                    10                    15  
 Lys Lys Lys Leu Lys Lys Glu Arg Glu Ala Leu Gly Asp Lys Ala Pro  
                   20                    25                    30  
 Pro Lys Pro Val Pro Lys Thr Ile Asp Asn Gln Arg Val Tyr Asp Glu  
                   35                    40                    45  
 Thr Thr Val Asp Pro Asn Asp Glu Glu Val Ala Tyr Asp Glu Ala Thr  
                   50                    55                    60  
 Asp Glu Phe Ala Ser Tyr Phe Asn Lys Gln Thr Ser Pro Lys Ile Leu  
 65                    70                    75                    80  
 Ile Thr Thr Ser

<210> 4911  
 <211> 330  
 <212> PRT  
 <213> Homo sapiens

<400> 4911  
 Met Ala Thr Val Glu Pro Glu Thr Thr Pro Thr Pro Asn Pro Pro Thr  
 1                    5                    10                    15  
 Thr Glu Glu Glu Lys Thr Glu Ser Asn Gln Glu Val Ala Asn Pro Glu  
                   20                    25                    30  
 His Tyr Ile Lys His Pro Leu Gln Asn Arg Trp Ala Leu Trp Phe Phe  
                   35                    40                    45  
 Lys Asn Asp Lys Ser Lys Thr Trp Gln Ala Asn Leu Arg Leu Ile Ser  
                   50                    55                    60  
 Lys Phe Asp Thr Val Glu Asp Phe Trp Ala Leu Tyr Asn His Ile Gln  
 65                    70                    75                    80  
 Leu Ser Ser Asn Leu Met Pro Gly Cys Asp Tyr Ser Leu Phe Lys Asp  
                   85                    90                    95  
 Gly Ile Glu Pro Met Trp Glu Asp Glu Lys Asn Lys Arg Gly  
                   100                    105                    110

<210> 4912  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 4912  
 Met Ser Phe Ile Phe Asp Trp Ile Tyr Ser Gly Phe Ser Ser Val Leu  
 1                    5                    10                    15  
 Gln Phe Leu Gly Leu Tyr Lys Lys Thr Gly Lys Leu Val Phe Leu Gly  
                   20                    25                    30  
 Leu Asp Asn Ala Gly Lys Thr Thr Leu Leu His Met Leu Lys Asp Asp  
                   35                    40                    45  
 Arg Leu Gly Gln His Val Pro Thr Leu His Pro Thr Ser  
                   50                    55                    60

<210> 4913  
 <211> 282  
 <212> PRT  
 <213> Homo sapiens

<400> 4913  
 Met Ser Glu Phe Asn Asn Asn Phe Arg Gln Gln Met Glu Asn Tyr Pro

1                    5                    10                    15  
 Lys Asn Asn His Thr Ala Ser Ile Leu Asp Arg Met Gln Ala Asp Phe  
                   20                    25                    30  
 Lys Cys Cys Gly Ala Ala Asn Tyr Thr Asp Trp Glu Lys Ile Pro Ser  
                   35                    40                    45  
 Met Ser Lys Asn Arg Val Pro Asp Ser Cys Cys Ile Asn Val Thr Val  
                   50                    55                    60  
 Gly Cys Gly Ile Asn Phe Asn Glu Lys Ala Ile His Lys Glu Gly Cys  
 65                    70                    75                    80  
 Val Glu Lys Ile Gly Gly Trp Leu Arg Lys Asn Val Leu Val  
                   85                    90

<210> 4914  
 <211> 357  
 <212> PRT  
 <213> Homo sapiens

<400> 4914  
 Met Ser Ile Pro Phe Ser Asn Thr His Tyr Arg Ile Pro Gln Gly Phe  
 1                    5                    10                    15  
 Gly Asn Leu Leu Glu Gly Leu Thr Arg Glu Ile Leu Arg Glu Gln Pro  
                   20                    25                    30  
 Asp Asn Ile Pro Ala Phe Ala Ala Tyr Phe Glu Ser Leu Leu Glu  
                   35                    40                    45  
 Lys Arg Glu Lys Thr Asn Phe Asp Pro Ala Glu Trp Gly Ser Lys Val  
                   50                    55                    60  
 Glu Asp Arg Phe Tyr Asn Asn His Ala Phe Glu Glu Xaa Glu Pro Pro  
 65                    70                    75                    80  
 Glu Lys Ser Asp Pro Lys Gln Glu Glu Ser Gln Ile Ser Gly Lys Glu  
                   85                    90                    95  
 Glu Glu Thr Ser Val Thr Ile Leu Asp Ser Ser Glu Glu Asp Lys Glu  
                   100                    105                    110  
 Lys Glu Glu Val Ala Ala Val  
                   115

<210> 4915  
 <211> 309  
 <212> PRT  
 <213> Homo sapiens

<400> 4915  
 Met Thr Gly Lys Val Met Ala Ser Lys Thr Ser Glu Leu Ser Tyr Leu  
 1                    5                    10                    15  
 Asp Ile Phe Ile Gln Cys Val Gly Cys Tyr Thr Cys Ile Thr Ala Ile  
                   20                    25                    30  
 Ile Glu Leu Ser His Gly Ser Phe Glu Lys Gln Asp Arg Asp Val Leu  
                   35                    40                    45  
 Lys Ala Ser Gly Phe Asp Phe Leu Val Arg Cys Cys Gly Thr Trp His  
                   50                    55                    60  
 Leu Thr Thr Arg Ile Val Val Cys Lys Glu Lys Thr Ser Arg Lys Arg  
 65                    70                    75                    80  
 Gln Gln Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys  
                   85                    90                    95  
 Lys Lys Lys Lys Lys Lys Lys

100

<210> 4916  
<211> 162  
<212> PRT  
<213> Homo sapiens

<400> 4916  
Met Pro Thr Thr Gln Gln Ser Pro Gln Asp Glu Gln Glu Lys Leu Leu  
1 5 10 15  
Asp Glu Ala Ile Gln Ala Val Lys Val Gln Ser Phe Gln Met Lys Arg  
20 25 30  
Cys Leu Asp Lys Asn Lys Leu Met Asp Ala Leu Lys His Ala Ser Asn  
35 40 45  
Met Leu Gly Glu Leu Arg  
50

<210> 4917  
<211> 459  
<212> PRT  
<213> Homo sapiens

<400> 4917  
Met Ser Ile Phe Thr Pro Thr Asn Gln Ile Arg Leu Thr Asn Val Ala  
1 5 10 15  
Val Val Arg Met Lys Arg Ala Gly Lys Arg Phe Glu Ile Ala Cys Tyr  
20 25 30  
Lys Asn Lys Val Val Gly Trp Arg Ser Gly Val Glu Lys Asp Leu Asp  
35 40 45  
Glu Val Leu Gln Thr His Ser Val Phe Val Asn Val Ser Lys Gly Gln  
50 55 60  
Val Ala Lys Lys Glu Asp Leu Ile Ser Ala Phe Gly Thr Asp Asp Gln  
65 70 75 80  
Thr Glu Ile Cys Lys Gln Ile Leu Thr Lys Gly Glu Val Gln Val Ser  
85 90 95  
Asp Lys Glu Arg His Thr Gln Leu Glu Gln Met Phe Arg Asp Ile Ala  
100 105 110  
Thr Ile Val Ala Asp Lys Cys Val Asn Pro Glu Thr Lys Arg Pro Tyr  
115 120 125  
Thr Val Ile Leu Ile Glu Arg Ala Met Lys Asp Ile His Tyr Ser Val  
130 135 140  
Lys Thr Asn Lys Ser Thr Lys Gln Gln  
145 150

<210> 4918  
<211> 318  
<212> PRT  
<213> Homo sapiens

<400> 4918  
Met Pro Lys Ser Lys Arg Asp Lys Lys Val Ser Leu Thr Lys Thr Ala  
1 5 10 15  
Lys Lys Gly Leu Glu Leu Lys Gln Asn Leu Ile Glu Glu Leu Arg Lys  
20 25 30



Cys Val Asp Thr Tyr Lys Tyr Leu Phe Ile Phe Ser Val Ala Asn Met  
 35 40 45  
 Arg Asn Ser Lys Leu Lys Asp Ile Arg Asn Ala Trp Lys His Ser Arg  
 50 55 60  
 Met Phe Phe Gly Lys Asn Lys Val Met Met Val Ala Leu Gly Arg Ser  
 65 70 75 80  
 Pro Ser Asp Glu Tyr Lys Asp Asn Leu His Gln Val Ser Lys Arg Leu  
 85 90 95  
 Arg Gly Glu Val Gly Leu Leu Phe Thr Asn  
 100 105

<210> 4919  
 <211> 606  
 <212> PRT  
 <213> Homo sapiens

<400> 4919  
 Met Ser Asn Leu Asn Thr Gln Val Lys Asp Thr Met Asn Gly His Ile  
 1 5 10 15  
 Ser Asn His Pro Ser Ser Phe Gly Met Tyr Pro Ser Gln Met Asn Gly  
 20 25 30  
 Tyr Gly Ser Ser Pro Thr Phe Ser Gln Thr Asp Arg Glu His Gly Ser  
 35 40 45  
 Lys Thr Ser Ala Lys Ala Leu Tyr Glu Gln Arg Lys Asn Tyr Ala Arg  
 50 55 60  
 Asp Ser Val Ser Ser Val Ser Asp Ile Ser Gln Tyr Arg Val Glu His  
 65 70 75 80  
 Leu Thr Thr Phe Val Leu Asp Arg Lys Asp Ala Met Ile Thr Val Asp  
 85 90 95  
 Asp Gly Ile Arg Lys Leu Lys Leu Leu Asp Ala Lys Gly Lys Val Trp  
 100 105 110  
 Thr Gln Asp Met Ile Leu Gln Val Asp Asp Arg Ala Val Ser Leu Ile  
 115 120 125  
 Asp Leu Glu Ser Lys Asn Glu Leu Glu Asn Phe Pro Leu Asn Thr Ile  
 130 135 140  
 Gln His Cys Gln Ala Val Met His Ser Cys Ser Tyr Asp Ser Val Leu  
 145 150 155 160  
 Ala Leu Val Cys Lys Glu Pro Thr Gln Asn Lys Pro Asp Leu His Leu  
 165 170 175  
 Phe Gln Cys Asp Glu Val Lys Ala Asn Leu Ile Ser Glu Asp Ile Glu  
 180 185 190  
 Ser Ala Ile Ser Asp Ser Lys Gly Gly Lys  
 195 200

<210> 4920  
 <211> 297  
 <212> PRT  
 <213> Homo sapiens

<400> 4920  
 Met Lys Pro Ala Met Glu Thr Ala Ala Glu Glu Asn Thr Glu Gln Ser  
 1 5 10 15  
 Gln Glu Arg Lys Gly Cys Phe Glu Cys Cys Ile Lys Cys Leu Gly Gly  
 20 25 30



<212> PRT  
<213> Homo sapiens

<400> 4923  
Met Glu Glu Asp Gln Glu Leu Glu Arg Lys Ile Ser Gly Leu Lys Thr  
1 5 10 15  
Ser Met Ala Glu Gly Glu Arg Lys Thr Ala Leu Glu Met Val Gln Ala  
20 25 30  
Ala Gly Thr Asp Arg His Cys Val Thr Phe Val Leu His Glu Glu Asp  
35 40 45  
His Thr Leu Gly Asn Ser Leu Arg Tyr Met Ile Met Xaa Asn Pro  
50 55 60

<210> 4924  
<211> 189  
<212> PRT  
<213> Homo sapiens

<400> 4924  
Met Phe Lys Asn Thr Phe Gln Ser Gly Phe Leu Ser Ile Leu Tyr Ser  
1 5 10 15  
Ile Gly Ser Lys Pro Leu Gln Ile Trp Asp Lys Lys Val Arg Asn Gly  
20 25 30  
His Ile Lys Arg Ile Thr Asp Asn Asp Ile Gln Ser Leu Val Leu Glu  
35 40 45  
Ile Glu Gly Thr Asn Val Ser Thr Thr Tyr Ile Xaa Cys Pro Ala  
50 55 60

<210> 4925  
<211> 330  
<212> PRT  
<213> Homo sapiens

<400> 4925  
Met Thr Ala Ala Ile Arg Arg Gln Arg Glu Leu Ser Ile Leu Pro Lys  
1 5 10 15  
Val Thr Leu Glu Ala Met Asn Thr Thr Val Met Gln Gly Phe Asn Arg  
20 25 30  
Ser Glu Arg Cys Pro Arg Asp Thr Arg Ile Val Gln Leu Val Phe Pro  
35 40 45  
Ala Leu Tyr Thr Val Val Phe Leu Thr Gly Ile Leu Leu Asn Thr Leu  
50 55 60  
Ala Leu Trp Val Phe Val His Ile Pro Ser Ser Ser Thr Phe Ile Ile  
65 70 75 80  
Tyr Leu Lys Asn Thr Leu Val Ala Asp Leu Ile Met Thr Pro Val Gly  
85 90 95  
Leu Leu His Ala Leu Leu Met Ala Gly Gly Ser Cys Pro Asp  
100 105 110

<210> 4926  
<211> 348  
<212> PRT  
<213> Homo sapiens

004220" 66667560

&lt;400&gt; 4926

```

Met Ser His Val Val' Val Lys Asn Asp Pro Glu Leu Asp Gln Gln Leu
1          5          10          15
Ala Asn Leu Asp Leu Asn Ser Glu Lys Gln Ser Gly Gly Ala Ser Thr
          20          25          30
Ala Ser Lys Gly Arg Tyr Ile Pro Pro His Leu Arg Asn Arg Glu Ala
          35          40          45
Ser Lys Gly Phe His Asp Lys Asp Ser Ser Gly Trp Ser Cys Ser Lys
          50          55          60
Asp Lys Asp Ala Tyr Ser Ser Phe Gly Ser Arg Asp Ser Arg Gly Lys
65          70          75          80
Pro Gly Tyr Phe Ser Glu Arg Gly Ser Gly Ser Arg Gly Arg Phe Asp
          85          90          95
Asp Arg Gly Arg Xaa Thr Met Met Val Leu Ala Ile Val Xaa Asp Leu
          100          105          110
Ala Leu Ala Asp
          115

```

&lt;210&gt; 4927

&lt;211&gt; 348

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4927

```

Met Asp Ile Arg Pro Asn His Thr Ile Tyr Ile Asn Asn Met Asn Asp
1          5          10          15
Lys Ile Lys Lys Glu Glu Leu Lys Arg Ser Leu Tyr Ala Leu Phe Ser
          20          25          30
Gln Phe Gly His Val Val Asp Ile Val Ala Leu Lys Thr Met Lys Met
          35          40          45
Arg Gly Gln Ala Phe Val Ile Phe Lys Glu Leu Gly Ser Ser Thr Asn
          50          55          60
Ala Leu Arg Gln Leu Gln Gly Phe Pro Phe Tyr Gly Lys Pro Met Arg
65          70          75          80
Ile Gln Tyr Ala Lys Thr Asp Ser Asp Ile Ile Ser Lys Met Arg Gly
          85          90          95
Thr Phe Ala Asp Lys Glu Lys Lys Lys Glu Lys Lys Lys Ala Lys Thr
          100          105          110
Val Glu Gln Thr
          115

```

&lt;210&gt; 4928

&lt;211&gt; 348

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4928

```

Met Asp Ile Arg Pro Asn His Thr Ile Tyr Ile Asn Asn Met Asn Asp
1          5          10          15
Lys Ile Lys Lys Glu Glu Leu Lys Arg Ser Leu Tyr Ala Leu Phe Ser
          20          25          30
Gln Phe Gly His Val Val Asp Ile Val Ala Leu Lys Thr Met Lys Met
          35          40          45
Arg Gly Gln Ala Phe Val Ile Phe Lys Glu Leu Gly Ser Ser Thr Asn

```

50                      55                      60  
 Ala Leu Arg Gln Leu Gln Gly Phe Pro Phe Tyr Gly Lys Pro Met Arg  
 65                      70                      75                      80  
 Ile Gln Tyr Ala Lys Thr Asp Ser Asp Ile Ile Ser Lys Met Arg Gly  
                     85                      90                      95  
 Thr Phe Ala Asp Lys Glu Lys Lys Lys Glu Lys Lys Lys Ala Lys Thr  
                     100                      105                      110  
 Val Glu Gln Thr  
                     115

<210> 4929  
 <211> 393  
 <212> PRT  
 <213> Homo sapiens

<400> 4929  
 Met Thr Thr Leu Val Leu Asp Asn Gly Ala Tyr Asn Ala Lys Ile Gly  
 1                      5                      10                      15  
 Tyr Ser His Glu Asn Val Ser Val Ile Pro Asn Cys Gln Phe Arg Ser  
                     20                      25                      30  
 Lys Thr Ala Arg Leu Lys Thr Phe Thr Ala Asn Gln Ile Asp Glu Ile  
                     35                      40                      45  
 Lys Asp Pro Ser Gly Leu Phe Tyr Ile Leu Pro Phe Gln Lys Gly Tyr  
                     50                      55                      60  
 Leu Val Asn Trp Asp Val Gln Arg Gln Val Trp Asp Tyr Leu Phe Gly  
 65                      70                      75                      80  
 Lys Glu Met Tyr Gln Val Asp Phe Leu Asp Thr Asn Ile Ile Ile Thr  
                     85                      90                      95  
 Glu Pro Tyr Phe Asn Phe Thr Ser Ile Gln Glu Ser Met Asn Glu Ile  
                     100                      105                      110  
 Leu Phe Glu Glu Tyr Gln Phe Gln Ala Val Leu Arg Val Asn Ala Gly  
                     115                      120                      125  
 Ala Leu Ser  
                     130

<210> 4930  
 <211> 324  
 <212> PRT  
 <213> Homo sapiens

<400> 4930  
 Met Thr Thr Leu Val Leu Asp Asn Gly Ala Tyr Asn Ala Lys Ile Gly  
 1                      5                      10                      15  
 Tyr Ser His Glu Asn Val Ser Val Ile Pro Asn Cys Gln Phe Arg Ser  
                     20                      25                      30  
 Lys Thr Ala Arg Leu Lys Thr Phe Thr Ala Asn Gln Ile Asp Glu Ile  
                     35                      40                      45  
 Lys Asp Pro Ser Gly Leu Phe Tyr Ile Leu Pro Phe Gln Lys Val Asp  
                     50                      55                      60  
 Phe Leu Asp Thr Asn Ile Ile Ile Thr Glu Pro Tyr Phe Asn Phe Thr  
 65                      70                      75                      80  
 Ser Ile Gln Glu Ser Met Asn Glu Ile Leu Phe Glu Glu Tyr Gln Phe  
                     85                      90                      95  
 Gln Ala Val Leu Arg Val Asn Ala Gly Ala Leu Ser

100

105

<210> 4931  
 <211> 246  
 <212> PRT  
 <213> Homo sapiens

<400> 4931  
 Met Ser Ala Leu Asn Trp Lys Pro Phe Val Tyr Gly Gly Leu Ala Ser  
 1 5 10 15  
 Ile Thr Ala Glu Cys Gly Thr Phe Pro Ile Asp Leu Thr Lys Thr Arg  
 20 25 30  
 Leu Gln Ile Gln Gly Gln Thr Asn Asp Ala Lys Phe Lys Glu Ile Arg  
 35 40 45  
 Tyr Arg Xaa Met Leu His Ala Leu Val Arg Ile Gly Arg Glu Xaa Gly  
 50 55 60  
 Ala Glu Ser Thr Leu Leu Gly Asp Cys Pro Arg Asp Val Thr Pro Gly  
 65 70 75 80  
 Ile Leu

<210> 4932  
 <211> 300  
 <212> PRT  
 <213> Homo sapiens

<400> 4932  
 Met Gly Tyr His Phe Glu Leu Pro Gly Pro Arg Met Val Val Thr Asn  
 1 5 10 15  
 Leu Leu Thr Arg Asn Gln Asp Lys Gln Arg Gln Lys Arg Gln Glu Glu  
 20 25 30  
 Gln Lys Gln Gln Gln Leu Lys Glu Gln Lys Lys Leu Ile Ala Met Leu  
 35 40 45  
 Glu Asn Gly Leu Gly Leu Pro Pro Gly Met Xaa Glu Leu Leu Gly Gly  
 50 55 60  
 Pro Lys Pro Asp Ser Arg Met Gln Glu Phe Phe Gln Pro Pro Pro Pro  
 65 70 75 80  
 Arg Pro Pro Asn Pro Gln Asn Val Pro Phe Ser Gln Arg Ser Xaa Met  
 85 90 95  
 Met Lys Lys Pro  
 100

<210> 4933  
 <211> 372  
 <212> PRT  
 <213> Homo sapiens

<400> 4933  
 Met Ala Thr Leu Ile Tyr Val Asp Lys Glu Asn Gly Glu Pro Gly Thr  
 1 5 10 15  
 Arg Val Val Ala Lys Asp Gly Leu Lys Leu Gly Ser Gly Pro Ser Ile  
 20 25 30  
 Lys Ala Leu Asp Gly Arg Ser Gln Val Ser Thr Pro Arg Phe Gly Lys  
 35 40 45  
 Thr Phe Asp Ala Pro Pro Ala Leu Pro Lys Ala Thr Arg Lys Ala Leu

004220" 15664560

50		55		60
Gly Thr Val Asn Arg Ala Thr Glu Lys Ser Val Lys Thr Lys Gly Pro				
65		70		75
Leu Lys Gln Lys Gln Pro Ser Phe Ser Ala Lys Lys Met Thr Glu Lys				80
	85		90	95
Thr Val Lys Ala Lys Ser Ser Val Pro Ala Ser Asp Xaa Ala Ile Gln				
	100		105	110
Lys Xaa Lys Ile Leu Ser Leu Gln Ser Ser Arg Leu				
	115		120	

<210> 4934  
 <211> 261  
 <212> PRT  
 <213> Homo sapiens

<400> 4934
Met Ala Glu Val Pro Glu Leu Ala Ser Glu Met Met Ala Tyr Tyr Ser
1 5 10 15
Gly Asn Glu Asp Asp Leu Phe Phe Glu Ala Asp Gly Pro Lys Gln Met
20 25 30
Lys Cys Ser Phe Gln Asp Leu Asp Leu Cys Pro Leu Asp Gly Gly Ile
35 40 45
Gln Leu Arg Ile Ser Asp His His Tyr Ser Lys Gly Phe Arg Gln Ala
50 55 60
Ala Ser Val Val Val Ala Met Asp Lys Leu Arg Lys Met Leu Val Pro
65 70 75 80
Cys Pro Gln Thr Phe Gln Glu
85

<210> 4935  
 <211> 246  
 <212> PRT  
 <213> Homo sapiens

<400> 4935
Met Gln Ile Val Arg Tyr Ser Glu Gln Thr Leu Lys Ile Ala Val Ile
1 5 10 15
Ser Lys Asn Pro Val Leu Val Ser Gln Tyr Glu Lys Val Asp Ala Gly
20 25 30
Glu Gln Arg Leu Met Asn Glu Ala Phe Gln Pro Ala Ser Asp Leu Phe
35 40 45
Gly Pro Cys Ile Leu His Gln Ile Gly Ser Pro Pro Thr Leu Arg Pro
50 55 60
Pro Lys Thr Leu Asn Ser Ser Ser Val Ile Leu Thr Glu Arg Tyr Pro
65 70 75 80
Leu Gln

<210> 4936  
 <211> 231  
 <212> PRT  
 <213> Homo sapiens

<400> 4936  
 Met Gln Ile Val Arg Tyr Ser Glu Gln Thr Leu Lys Ile Ala Val Ile

1 5 10 15  
 Ser Lys Asn Pro Val Leu Val Ser Gln Tyr Glu Lys Val Asp Ala Gly  
 20 25 30  
 Glu Gln Arg Leu Met Asn Glu Ala Phe Gln Pro Ala Ser Asp Leu Phe  
 35 40 45  
 Gly Pro Cys Ile Leu His Gln Ile Gly Ser Pro Pro Thr Leu Arg Pro  
 50 55 60  
 Pro Lys Thr Leu Asn Ser Ser Ser Val Ile Leu Thr Glu  
 65 70 75

<210> 4937

<211> 270

<212> PRT

<213> Homo sapiens

<400> 4937

Met Gly Asn Arg Val Cys Cys Gly Gly Ser Trp Ser Cys Pro Ser Thr  
 1 5 10 15  
 Phe Gln Lys Lys Lys Lys Arg Gly Ser Gln Thr Arg Arg Thr Leu Lys  
 20 25 30  
 Pro Gln Pro Gln Gln Leu Gln Gln Asn Leu Pro Lys Gly His Glu Thr  
 35 40 45  
 Thr Gly His Thr Tyr Glu Arg Val Leu Gln Gln Gln Gly Ser Gln Glu  
 50 55 60  
 Arg Ser Pro Gly Xaa Met Ser Glu Asp Ser Asn Leu His Tyr Ala Asp  
 65 70 75 80  
 Ile Gln Val Cys Ser Arg Pro His Ala Arg  
 85 90

<210> 4938

<211> 324

<212> PRT

<213> Homo sapiens

<400> 4938

Met Lys Leu Pro Ile Phe Ile Ala Asp Ala Phe Thr Ala Arg Ala Phe  
 1 5 10 15  
 Arg Gly Asn Pro Ala Ala Val Cys Leu Leu Glu Asn Glu Leu Asp Glu  
 20 25 30  
 Asp Met His Gln Lys Ile Ala Arg Glu Met Asn Leu Ser Glu Thr Ala  
 35 40 45  
 Phe Ile Arg Lys Leu His Pro Thr Asp Asn Phe Ala Xaa Xaa Ser Cys  
 50 55 60  
 Phe Gly Leu Arg Trp Phe Thr Pro Ala Ser Glu Val Pro Leu Cys Gly  
 65 70 75 80  
 His Ala Xaa Leu Ala Ser Ala Ala Val Leu Phe His Lys Ile Lys Xaa  
 85 90 95  
 Met Asn Ser Thr Leu Thr Phe Val Thr Leu Ser Gly  
 100 105

<210> 4939

<211> 201

<212> PRT

<213> Homo sapiens



<400> 4939

Met His Thr Gly Gly Leu Gly Gly Tyr Gly Ser Gly Asp Ser Glu Asp  
1 5 10 15  
Glu Arg Ser Asp Arg Gly Ser Glu Ser Ser Asp Thr Asp Asp Glu Glu  
20 25 30  
Leu Arg His Arg Ile Arg Gln Lys Gln Glu Ala Phe Trp Arg Lys Glu  
35 40 45  
Lys Glu Gln Gln Leu Leu His Asp Lys Gln Met Glu Glu Lys Gln  
50 55 60  
Gln Thr Glu  
65

<210> 4940

<211> 267

<212> PRT

<213> Homo sapiens

<400> 4940

Met Gly Asp Val Lys Asn Phe Leu Tyr Ala Trp Cys Gly Lys Arg Lys  
1 5 10 15  
Met Thr Pro Ser Tyr Glu Ile Arg Ala Val Gly Asn Lys Asn Arg Gln  
20 25 30  
Lys Phe Met Cys Glu Val Gln Val Glu Gly Tyr Asn Tyr Thr Gly Met  
35 40 45  
Gly Asn Ser Thr Asn Lys Lys Asp Ala Gln Ser Asn Ala Ala Arg Asp  
50 55 60  
Phe Val Asn Tyr Leu Val Arg Ile Asn Glu Ile Lys Ser Glu Glu Val  
65 70 75 80  
Pro Ala Xaa Gly Val Ala Ser Pro Pro  
85

<210> 4941

<211> 417

<212> PRT

<213> Homo sapiens

<400> 4941

Met Phe Ser Arg Ala Gly Val Ala Gly Leu Ser Ala Trp Thr Leu Gln  
1 5 10 15  
Pro Gln Trp Ile Gln Val Arg Asn Met Ala Thr Leu Lys Asp Ile Thr  
20 25 30  
Arg Arg Leu Lys Ser Ile Lys Asn Ile Gln Lys Ile Thr Lys Ser Met  
35 40 45  
Lys Met Val Ala Ala Ala Lys Tyr Ala Arg Ala Glu Arg Glu Leu Lys  
50 55 60  
Pro Ala Arg Ile Tyr Gly Leu Gly Ser Leu Ala Leu Tyr Glu Lys Ala  
65 70 75 80  
Asp Ile Lys Gly Pro Glu Asp Lys Lys Lys His Leu Leu Ile Gly Val  
85 90 95  
Ser Ser Asp Arg Gly Leu Cys Gly Ala Ile His Ser Ser Ile Ala Lys  
100 105 110  
Gln Met Lys Ser Glu Val Ala Thr Leu Thr Ala Ala Gly Lys Glu Val  
115 120 125

Xaa Leu Val Gly Ile Gly Asp Leu Phe Ser Gly  
130 135

<210> 4942  
<211> 276  
<212> PRT  
<213> Homo sapiens

<400> 4942  
Met Lys Met Val Ala Ala Ala Lys Tyr Ala Arg Ala Glu Arg Glu Leu  
1 5 10 15  
Lys Pro Ala Arg Ile Tyr Gly Leu Gly Ser Leu Ala Leu Tyr Glu Lys  
20 25 30  
Ala Asp Ile Lys Gly Pro Glu Asp Lys Lys Lys His Leu Leu Ile Gly  
35 40 45  
Val Ser Ser Asp Arg Gly Leu Cys Gly Ala Ile His Ser Ser Ile Ala  
50 55 60  
Lys Gln Met Lys Ser Glu Val Ala Thr Leu Thr Ala Ala Gly Lys Glu  
65 70 75 80  
Val Xaa Leu Val Gly Ile Gly Asp Leu Phe Ser Gly  
85 90

<210> 4943  
<211> 174  
<212> PRT  
<213> Homo sapiens

<400> 4943  
Met Asp Ala Asn Asp Lys Lys Ile Gln Glu Lys Asp Arg Glu Leu Glu  
1 5 10 15  
Ile Lys Asn Ile Tyr Ser His Pro Ile Leu Lys Asn Leu His Asp Thr  
20 25 30  
Glu Asp Tyr Pro Lys Val Ser Ser Thr Lys Ser Val Gln Ala Asp Arg  
35 40 45  
Lys Ile Leu Pro Phe Thr Ser Met Arg His  
50 55

<210> 4944  
<211> 345  
<212> PRT  
<213> Homo sapiens

<400> 4944  
Met Gly Gln Gln Ile Ser Asp Gln Thr Gln Leu Val Ile Asn Lys Leu  
1 5 10 15  
Pro Glu Lys Val Ala Lys His Val Xaa Leu Val Arg Glu Ser Gly Ser  
20 25 30  
Leu Thr Tyr Glu Glu Phe Leu Gly Arg Val Ala Glu Leu Asn Asp Val  
35 40 45  
Thr Ala Lys Val Ala Ser Gly Gln Glu Lys His Leu Leu Phe Glu Val  
50 55 60  
Gln Pro Gly Ser Asp Ser Ser Ala Phe Trp Lys Val Val Val Arg Val  
65 70 75 80  
Val Cys Thr Lys Ile Asn Lys Ser Ser Gly Ile Val Glu Ala Ser Arg

004220"666ET560

85                      90                      95  
 Ile Met Asn Leu Tyr Gln Phe Ile Gln Leu Tyr Lys Asp Ile Thr Ser  
                     100                      105                      110  
 Gln Ala Ala  
                     115

<210> 4945  
 <211> 414  
 <212> PRT  
 <213> Homo sapiens

<400> 4945  
 Met Pro Met Ala Gly Leu Leu Lys Gly Leu Val Arg Gln Leu Glu Gln  
 1                      5                      10                      15  
 Phe Arg Val Gln Gln Gln Ala Ser Lys Met Pro Pro Lys Gly Lys Ser  
                     20                      25                      30  
 Gly Ser Gly Lys Ala Gly Lys Gly Gly Ala Ala Ser Gly Ser Asp Ser  
                     35                      40                      45  
 Ala Asp Lys Lys Ala Gln Gly Pro Lys Gly Gly Gly Asn Ala Val Lys  
                     50                      55                      60  
 Val Arg His Ile Leu Cys Glu Lys His Gly Lys Ile Met Glu Ala Met  
 65                      70                      75                      80  
 Glu Lys Leu Lys Ser Gly Met Arg Phe Asn Glu Val Ala Ala Gln Tyr  
                     85                      90                      95  
 Ser Glu Asp Lys Ala Arg Gln Gly Gly Asp Leu Gly Trp Met Thr Arg  
                     100                      105                      110  
 Gly Ser Met Val Gly Pro Phe Gln Glu Ala Ala Phe Ala Leu Pro Val  
                     115                      120                      125  
 Ser Gly Met Asp Lys Pro Val Phe Thr Asp  
                     130                      135

<210> 4946  
 <211> 345  
 <212> PRT  
 <213> Homo sapiens

<400> 4946  
 Met Pro Met Ala Gly Leu Leu Lys Gly Leu Val Arg Gln Leu Glu Gln  
 1                      5                      10                      15  
 Phe Arg Val Gln Gln Gln Ala Ser Lys Met Pro Pro Lys Gly Lys Ser  
                     20                      25                      30  
 Gly Ser Gly Lys Ala Gly Lys Gly Gly Ala Ala Ser Gly Ser Asp Ser  
                     35                      40                      45  
 Ala Asp Lys Lys Ala Gln Gly Pro Lys Gly Gly Gly Asn Ala Val Lys  
                     50                      55                      60  
 Val Arg His Ile Leu Cys Glu Lys His Gly Lys Ile Met Glu Ala Met  
 65                      70                      75                      80  
 Glu Lys Leu Lys Ser Gly Met Arg Phe Asn Glu Val Ala Ala Gln Tyr  
                     85                      90                      95  
 Ser Glu Asp Lys Ala Arg Gln Gly Ile Pro Ser Leu Gln Gln His Ala  
                     100                      105                      110  
 Gly His Xaa  
                     115

<210> 4947  
 <211> 174  
 <212> PRT  
 <213> Homo sapiens

<400> 4947  
 Met Glu Ala Met Glu Lys Leu Lys Ser Gly Met Arg Phe Asn Glu Val  
 1 5 10 15  
 Ala Ala Gln Tyr Ser Glu Asp Lys Ala Arg Gln Gly Arg Met Gln Gln  
 20 25 30  
 Gln Gly Thr Ile Leu Glu Ala Glu Ser Ser Pro His Gln Ile Pro Ile  
 35 40 45  
 Leu Leu Ala Pro Ser Ser Trp Thr Leu Gln  
 50 55

<210> 4948  
 <211> 195  
 <212> PRT  
 <213> Homo sapiens

<400> 4948  
 Met Leu Phe Pro Pro Ser Ser Cys Leu Glu Gln Pro Asp Ser Cys Gln  
 1 5 10 15  
 Pro Tyr Gly Ser Ser Phe Tyr Ala Leu Glu Glu Lys His Val Gly Phe  
 20 25 30  
 Ser Leu Asp Val Gly Glu Ile Glu Lys Lys Gly Lys Gly Lys Arg  
 35 40 45  
 Arg Gly Arg Arg Ser Thr Lys Lys Arg Arg Arg Arg Gly Arg Lys Glu  
 50 55 60  
 Gly  
 65

<210> 4949  
 <211> 375  
 <212> PRT  
 <213> Homo sapiens

<400> 4949  
 Met Ala Leu Asp Gly Pro Glu Gln Met Glu Leu Glu Glu Gly Lys Ala  
 1 5 10 15  
 Gly Ser Gly Leu Arg Gln Tyr Tyr Leu Ser Lys Ile Glu Glu Leu Gln  
 20 25 30  
 Leu Ile Val Asn Asp Lys Ser Gln Asn Leu Arg Arg Leu Gln Ala Gln  
 35 40 45  
 Arg Asn Glu Leu Asn Ala Lys Val Arg Leu Leu Arg Glu Glu Leu Gln  
 50 55 60  
 Leu Leu Gln Glu Gln Gly Ser Tyr Val Gly Glu Val Val Arg Ala Met  
 65 70 75 80  
 Asp Lys Lys Lys Val Leu Val Lys Val His Pro Glu Gly Lys Phe Val  
 85 90 95  
 Val Asp Val Asp Lys Asn Ile Asp Ile Asn Asp Val Thr Pro Asn Cys  
 100 105 110  
 Arg Val Ala Leu Arg Asn Asp Ser Tyr Thr Leu His Lys  
 115 120 125

004220"666ET560

<210> 4950  
 <211> 531  
 <212> PRT  
 <213> Homo sapiens

<400> 4950  
 Met Leu Arg Leu Pro Thr Val Phe Arg Gln Met Arg Pro Val Ser Arg  
 1 5 10 15  
 Val Leu Ala Pro His Leu Thr Arg Ala Tyr Ala Lys Asp Val Lys Phe  
 20 25 30  
 Gly Ala Asp Ala Arg Ala Leu Met Leu Gln Gly Val Asp Leu Leu Ala  
 35 40 45  
 Asp Ala Val Ala Val Thr Met Gly Pro Lys Gly Arg Thr Val Ile Ile  
 50 55 60  
 Glu Gln Ser Trp Gly Ser Pro Lys Val Thr Lys Asp Gly Val Thr Val  
 65 70 75 80  
 Ala Lys Ser Ile Asp Leu Lys Asp Lys Tyr Lys Asn Ile Gly Ala Lys  
 85 90 95  
 Leu Val Gln Asp Val Ala Asn Asn Thr Asn Glu Glu Ala Gly Asp Gly  
 100 105 110  
 Thr Thr Thr Ala Thr Val Leu Ala Arg Ser Ile Ala Lys Glu Gly Phe  
 115 120 125  
 Glu Lys Ile Ser Lys Gly Ala Asn Pro Val Glu Ile Arg Arg Gly Val  
 130 135 140  
 Met Leu Ala Val Asp Ala Val Ile Ala Glu Leu Lys Lys Gln Ser Lys  
 145 150 155 160  
 Pro Val Thr Thr Pro Glu Glu Ile Ala Gln Val Ala Thr Ile Ser Ala  
 165 170 175  
 Asn

<210> 4951  
 <211> 633  
 <212> PRT  
 <213> Homo sapiens

<400> 4951  
 Met Ala Thr Gly Thr Gly Lys His Lys Leu Leu Ser Thr Gly Pro Thr  
 1 5 10 15  
 Glu Pro Trp Ser Ile Arg Glu Lys Leu Cys Leu Ala Ser Ser Val Met  
 20 25 30  
 Arg Ser Gly Asp Gln Asn Trp Val Ser Val Ser Arg Ala Ile Lys Pro  
 35 40 45  
 Phe Ala Glu Pro Gly Arg Pro Pro Asp Trp Phe Ser Gln Lys His Cys  
 50 55 60  
 Ala Ser Gln Tyr Ser Glu Leu Leu Glu Thr Thr Glu Thr Pro Lys Arg  
 65 70 75 80  
 Lys Arg Gly Glu Lys Gly Glu Val Val Glu Thr Val Glu Asp Val Ile  
 85 90 95  
 Val Arg Lys Leu Thr Ala Glu Arg Val Glu Glu Leu Lys Lys Val Ile  
 100 105 110  
 Lys Glu Thr Gln Glu Arg Tyr Arg Arg Leu Lys Arg Asp Ala Glu Leu  
 115 120 125  
 Ile Gln Ala Gly His Met Asp Ser Arg Leu Asp Glu Leu Cys Asn Asp

130		135		140
Ile Ala Thr Lys Lys Lys	Leu Glu Glu Glu Glu	Ala Glu Val Lys Arg		
145		150		155
Lys Ala Thr Asp Ala Ala	Tyr Gln Ala Arg Gln	Ala Val Lys Thr Pro		160
	165		170	175
Pro Arg Arg Leu Pro Thr	Val Met Val Arg Ser	Pro Ile Asp Ser Ala		
	180		185	190
Ser Pro Gly Gly Asp Tyr	Pro Leu Gly Asp Leu	Thr Pro Thr Thr Met		
	195		200	205
Glu Glu Ala				
210				

<210> 4952  
 <211> 234  
 <212> PRT  
 <213> Homo sapiens

<400> 4952
Met Asp Ser Arg Leu Asp Glu Leu Cys Asn Asp Ile Ala Thr Lys Lys
1 5 10 15
Lys Leu Glu Glu Glu Ala Glu Val Lys Arg Lys Ala Thr Asp Ala
20 25 30
Ala Tyr Gln Ala Arg Gln Ala Val Lys Thr Pro Pro Arg Arg Leu Pro
35 40 45
Thr Val Met Val Arg Ser Pro Ile Asp Ser Ala Ser Pro Gly Gly Asp
50 55 60
Tyr Pro Leu Gly Asp Leu Thr Pro Thr Thr Met Glu Glu Ala
65 70 75

<210> 4953  
 <211> 369  
 <212> PRT  
 <213> Homo sapiens

<400> 4953
Met Asn Leu Gly Asp Gly Leu Lys Leu Glu Thr Glu Leu Leu Asp Gly
1 5 10 15
Lys Thr Lys Leu Ile Leu Ser Pro Tyr Glu His Lys Ser Lys Ile Ser
20 25 30
Val Lys Met Gly Asn Lys Ala Lys Ile Ala Lys Cys Pro Leu Arg Thr
35 40 45
Lys Thr Gly His Ile Leu Lys Ser Thr Gln Asp Thr Cys Ile Gly Ser
50 55 60
Glu Lys Leu Leu Gln Lys Lys Pro Val Gly Ser Glu Thr Ser Gln Ala
65 70 75 80
Lys Gly Glu Lys Asn Gly Met Thr Phe Ser Ser Thr Lys Asp Leu Cys
85 90 95
Lys Gln Cys Ile Asp Lys Asp Cys Leu His Ile Gln Lys Glu Ile Ser
100 105 110
Pro Ala Thr Pro Asn Met Gln Lys Thr Arg Asn
115 120

<210> 4954  
 <211> 378

<212> PRT  
<213> Homo sapiens

<400> 4954

```

Met Ser Ile Gly Val Pro Ile Lys Val Leu His Glu Ala Glu Gly His
1           5           10           15
Ile Val Thr Cys Glu Thr Asn Thr Gly Glu Val Tyr Arg Gly Lys Leu
          20           25           30
Ile Glu Ala Glu Asp Asn Met Asn Cys Gln Met Ser Asn Ile Thr Val
          35           40           45
Thr Tyr Arg Asp Gly Arg Val Ala Gln Leu Glu Gln Val Tyr Ile Arg
          50           55           60
Gly Ser Lys Ile Arg Phe Leu Ile Leu Pro Asp Met Leu Lys Asn Ala
65           70           75           80
Pro Met Leu Lys Ser Met Lys Asn Lys Asn Gln Gly Ser Gly Ala Gly
          85           90           95
Arg Gly Lys Ala Ala Ile Leu Lys Ala Gln Val Ala Ala Arg Gly Arg
          100          105          110
Gly Arg Gly Met Gly Xaa Gly Asn Ile Phe Gln Lys Arg Arg
          115          120          125

```

<210> 4955  
<211> 267  
<212> PRT  
<213> Homo sapiens

<400> 4955

```

Met Ala Gly Asn Asp Glu Asn Tyr Ser Ala Glu Leu Arg Asn Ala Ser
1           5           10           15
Ala Val Met Lys Asn Gln Val Ala Arg Phe Asn Asp Leu Arg Phe Val
          20           25           30
Gly Arg Ser Gly Arg Gly Lys Ser Phe Thr Leu Thr Ile Thr Val Phe
          35           40           45
Thr Asn Pro Pro Gln Val Ala Thr Tyr His Arg Ala Ile Lys Val Thr
          50           55           60
Val Asp Gly Pro Arg Glu Pro Arg Arg His Arg Gln Lys Leu Asp Asp
65           70           75           80
Ser Lys Pro Ser Leu Phe Ser Asp Arg
          85

```

<210> 4956  
<211> 165  
<212> PRT  
<213> Homo sapiens

<400> 4956

```

Met Gly Gly Phe Phe Ser Ser Ile Phe Ser Ser Leu Phe Gly Thr Arg
1           5           10           15
Glu Met Arg Ile Leu Ile Leu Gly Leu Asp Gly Ala Gly Lys Thr Thr
          20           25           30
Ile Leu Tyr Arg Leu Gln Val Gly Glu Val Val Thr Thr Ile Pro Thr
          35           40           45
Ile Gly Phe Asn Val Glu Thr
          50           55

```

<210> 4957  
 <211> 345  
 <212> PRT  
 <213> Homo sapiens

<400> 4957  
 Met Glu Ser Gly Lys Met Ala Pro Pro Lys Asn Ala Pro Arg Asp Ala  
 1 5 10 15  
 Leu Val Met Ala Gln Ile Leu Lys Asp Met Gly Ile Thr Glu Tyr Glu  
 20 25 30  
 Pro Arg Val Ile Asn Gln Met Leu Glu Phe Ala Phe Arg Tyr Val Thr  
 35 40 45  
 Thr Ile Leu Asp Asp Ala Lys Ile Tyr Ser Ser His Ala Lys Lys Pro  
 50 55 60  
 Asn Val Asp Ala Asp Asp Val Arg Leu Ala Ile Gln Cys Arg Ala Asp  
 65 70 75 80  
 Gln Ser Phe Thr Ser Pro Pro Pro Arg Asp Phe Leu Leu Asp Ile Ala  
 85 90 95  
 Arg Gln Lys Asn Gln Thr Pro Leu Pro Leu Ile Lys Pro Tyr Ala Gly  
 100 105 110  
 Pro Arg Leu  
 115

<210> 4958  
 <211> 249  
 <212> PRT  
 <213> Homo sapiens

<400> 4958  
 Met Glu Ser Gly Lys Thr Ala Ser Pro Lys Ser Met Pro Lys Asp Ala  
 1 5 10 15  
 Gln Met Met Ala Gln Ile Leu Lys Asp Met Gly Ile Thr Glu Tyr Glu  
 20 25 30  
 Pro Arg Val Ile Asn Gln Met Leu Glu Phe Ala Phe Arg Xaa Val Thr  
 35 40 45  
 Thr Ile Leu Asp Asp Ala Lys Ile Tyr Ser Ser His Ala Lys Lys Ala  
 50 55 60  
 Thr Val Asp Ala Asp Asp Val Arg Xaa Ala Ile Gln Xaa Arg Ala Asp  
 65 70 75 80  
 Gln Ser Phe

<210> 4959  
 <211> 231  
 <212> PRT  
 <213> Homo sapiens

<400> 4959  
 Met Leu Glu Phe Ala Phe Arg Tyr Val Thr Thr Ile Leu Asp Asp Ala  
 1 5 10 15  
 Lys Ile Tyr Ser Ser His Ala Lys Lys Pro Asn Val Asp Ala Asp Asp  
 20 25 30  
 Val Arg Leu Ala Ile Gln Cys Arg Ala Asp Gln Ser Phe Thr Ser Pro  
 35 40 45

004220"666E560



Pro Pro Arg Asp Phe Leu Leu Asp Ile Ala Arg Gln Lys Asn Gln Thr  
 50 55 60  
 Pro Leu Pro Leu Ile Lys Pro Tyr Ala Gly Pro Arg Leu  
 65 70 75

<210> 4960  
 <211> 192  
 <212> PRT  
 <213> Homo sapiens

<400> 4960  
 Met Met Thr Ser Val Ser Ser Asp His Cys Arg Gly Ala Gln Glu Lys  
 1 5 10 15  
 Pro Gln Ile Ser Ala Ala Gln Ser Thr Gln Pro Gln Lys Gln Val Val  
 20 25 30  
 Gln Ala Thr Ala Glu Gln Met Arg Leu Ala Gln Val Ile Phe Asp Lys  
 35 40 45  
 Asn Asp Ser Asp Phe Glu Ala Lys Val Lys Gln Leu Met Glu Val Thr  
 50 55 60

<210> 4961  
 <211> 201  
 <212> PRT  
 <213> Homo sapiens

<400> 4961  
 Met Asp Arg Leu His Leu Arg Arg Thr Thr Glu Gln His Val Pro Glu  
 1 5 10 15  
 Val Glu Val Gln Val Lys Arg Arg Arg Thr Ala Ser Leu Ser Asn Gln  
 20 25 30  
 Glu Cys Gln Leu Tyr Pro Arg Arg Ser Gln Gln Gln Gln Val Pro Val  
 35 40 45  
 Val Asp Phe Gln Ala Glu Leu Arg Gln Ala Phe Leu Ala Glu Thr Pro  
 50 55 60  
 Arg Gly Gly  
 65

<210> 4962  
 <211> 270  
 <212> PRT  
 <213> Homo sapiens

<400> 4962  
 Met Gln Leu Glu His Cys Leu Ser Pro Ser Ile Met Leu Ser Lys Lys  
 1 5 10 15  
 Phe Leu Asn Val Ser Ser Ser Tyr Pro His Ser Gly Gly Ser Glu Leu  
 20 25 30  
 Val Leu His Asp His Pro Ile Ile Ser Thr Thr Asp Asn Leu Glu Arg  
 35 40 45  
 Ser Ser Pro Leu Lys Lys Ile Thr Arg Gly Met Thr Asn Gln Ser Asp  
 50 55 60  
 Thr Asp Asn Phe Pro Asp Ser Lys Asp Ser Pro Gly Asp Val Gln Arg  
 65 70 75 80  
 Ser Lys Leu Ser Pro Val Leu Asp Gly Val

85

90

<210> 4963  
 <211> 333  
 <212> PRT  
 <213> Homo sapiens

<400> 4963  
 Met Thr Gly Tyr Thr Pro Asp Glu Lys Leu Arg Leu Gln Gln Leu Arg  
 1 5 10 15  
 Glu Leu Arg Arg Arg Trp Leu Lys Asp Gln Glu Leu Ser Pro Arg Glu  
 20 25 30  
 Pro Val Leu Pro Pro Gln Lys Met Gly Pro Met Glu Lys Phe Trp Asn  
 35 40 45  
 Lys Phe Leu Glu Asn Lys Ser Pro Trp Arg Lys Met Val His Gly Val  
 50 55 60  
 Tyr Lys Lys Ser Ile Phe Val Phe Thr His Val Leu Val Pro Val Trp  
 65 70 75 80  
 Ile Ile His Tyr Tyr Met Lys Tyr His Val Ser Glu Lys Pro Tyr Gly  
 85 90 95  
 Ile Val Glu Lys Lys Ser Arg Ile Phe Pro Gly Asp Thr Ile Leu  
 100 105 110

<210> 4964  
 <211> 315  
 <212> PRT  
 <213> Homo sapiens

<400> 4964  
 Met Phe Ser Leu Arg Phe Ile Cys Val Lys Gln Asn Ser Val Tyr Trp  
 1 5 10 15  
 Cys Ser Val Pro Arg Glu Gly Trp His Ser Met Glu Val Ser Lys Asn  
 20 25 30  
 His His Tyr Ala Asn His Gln Glu Tyr Asp Pro Asp Thr Cys Ala Arg  
 35 40 45  
 Cys Ile Ser Val Arg Glu Ser Pro Arg Lys Thr Gln His Ser Gln Val  
 50 55 60  
 Val Glu Gly Ala Ile Val Thr Gln Arg Arg Asp Arg Ala Arg Ser Val  
 65 70 75 80  
 Ser Val Val Arg Met Gly Pro Leu Cys Pro Gly Val Pro Arg Gly Cys  
 85 90 95  
 Pro Tyr Gly Val Val Cys Leu Arg Ala  
 100 105

<210> 4965  
 <211> 231  
 <212> PRT  
 <213> Homo sapiens

<400> 4965  
 Met Leu Arg Ala Lys Asn Gln Leu Phe Leu Leu Ser Pro His Tyr Leu  
 1 5 10 15  
 Arg Gln Val Lys Glu Ser Ser Gly Ser Arg Leu Ile Gln Gln Arg Leu  
 20 25 30

**SECRET**

<213> Homo sapiens

<213> Homo sapiens

<213> Homo sapiens

Met Asp Ala Phe Glu Lys Val Arg Thr Lys Leu Glu Thr Gln Pro Gln

1 5 10 15  
 Glu Glu Tyr Glu Ile Ile Asn Val Glu Val Lys His Gly Gly Phe Val  
 20 25 30  
 Tyr Tyr Gln Glu Gly Cys Cys Leu Val Arg Ser Lys Asp Glu Glu Ala  
 35 40 45  
 Asp Asn Asp Asn Tyr Glu Val Leu Phe Asn Leu Glu Glu Leu Lys Leu  
 50 55 60  
 Asp Gln Pro Phe Ile Asp Val Ser Glu Leu Leu Gln Met Lys  
 65 70 75

<210> 4969  
 <211> 276  
 <212> PRT  
 <213> Homo sapiens

<400> 4969  
 Met Glu Lys Leu Tyr Lys Glu Asn Glu Gly Lys Pro Glu Asn Glu Arg  
 1 5 10 15  
 Asn Leu Glu Ser Glu Gly Lys Pro Glu Asp Glu Gly Ser Thr Glu Asp  
 20 25 30  
 Glu Gly Lys Ser Asp Glu Glu Glu Lys Pro Asp Met Glu Gly Lys Thr  
 35 40 45  
 Glu Cys Glu Gly Lys Arg Glu Asp Glu Gly Xaa Pro Gly Asp Glu Gly  
 50 55 60  
 Gln Leu Glu Asp Xaa Gly Asn Gln Glu Lys Gln Gly Lys Ser Glu Gly  
 65 70 75 80  
 Glu Xaa Lys Pro Gln Ser Glu Gly Lys Pro Ala Ser  
 85 90

<210> 4970  
 <211> 204  
 <212> PRT  
 <213> Homo sapiens

<400> 4970  
 Met Ala Thr Val Gln Gln Leu Glu Gly Arg Trp Arg Leu Val Asp Ser  
 1 5 10 15  
 Lys Gly Phe Asp Glu Tyr Met Lys Glu Leu Gly Glu Ala Pro Gly Leu  
 20 25 30  
 Ala Ala Pro Ala Thr Trp Arg Val Val Arg Ser Ser Val Pro Arg Ser  
 35 40 45  
 Pro Ser Ala Cys Gln Ile Leu Gly Gln Glu Met Leu Gly Gly Leu Pro  
 50 55 60  
 Pro Ser Pro Pro  
 65

<210> 4971  
 <211> 390  
 <212> PRT  
 <213> Homo sapiens

<400> 4971  
 Met Ser Asp Gln Gln Leu Asp Cys Ala Leu Asp Leu Met Arg Arg Leu  
 1 5 10 15

Pro Pro Gln Gln Ile Glu Lys Asn Leu Ser Asp Leu Ile Xaa Xaa Val  
 20 25 30  
 Pro Ser Leu Cys Glu Asp Leu Leu Ser Ser Val Asp Gln Pro Leu Lys  
 35 40 45  
 Ile Ala Arg Asp Lys Val Val Gly Lys Asp Tyr Leu Leu Cys Asp Tyr  
 50 55 60  
 Asn Arg Asp Gly Asp Ser Tyr Arg Ser Pro Trp Ser Asn Lys Tyr Asp  
 65 70 75 80  
 Pro Pro Leu Glu Asp Gly Ala Met Pro Ser Ala Arg Leu Arg Lys Leu  
 85 90 95  
 Glu Val Glu Ala Asn Asn Ala Phe Asp Gln Tyr Arg Asp Leu Tyr Phe  
 100 105 110  
 Glu Gly Gly Val Ser Ser Val Tyr Leu Trp Asp Leu Asp His Gly Phe  
 115 120 125  
 Ala Gly  
 130

<210> 4972  
 <211> 294  
 <212> PRT  
 <213> Homo sapiens

<400> 4972  
 Met Ala Gly Lys Lys Asn Val Leu Ser Ser Leu Ala Val Tyr Ala Glu  
 1 5 10 15  
 Asp Ser Glu Pro Glu Ser Asp Gly Glu Ala Gly Ile Glu Ala Val Gly  
 20 25 30  
 Ser Ala Ala Glu Glu Lys Gly Gly Leu Val Ser Asp Ala Tyr Gly Glu  
 35 40 45  
 Asp Asp Phe Ser Arg Leu Gly Gly Asp Glu Asp Gly Tyr Glu Glu Glu  
 50 55 60  
 Glu Asp Glu Asn Ser Arg Gln Ser Glu Asp Asp Asp Ser Glu Thr Glu  
 65 70 75 80  
 Lys Pro Glu Ala Asp Asp Pro Lys Asp Asn Thr Glu Ala Glu Lys Arg  
 85 90 95  
 Asp Pro

<210> 4973  
 <211> 183  
 <212> PRT  
 <213> Homo sapiens

<400> 4973  
 Met Ala Gly Lys Lys Asn Val Leu Ser Ser Leu Ala Val Tyr Ala Glu  
 1 5 10 15  
 Asp Ser Glu Pro Glu Ser Asp Gly Glu Ala Gly Ile Glu Ala Val Gly  
 20 25 30  
 Ser Ala Ala Glu Glu Lys Gly Gly Leu Val Ser Asp Ala Tyr Gly Glu  
 35 40 45  
 Asp Thr Asn Pro Leu Tyr Pro Ala Leu Ser Leu Pro Pro  
 50 55 60

<210> 4974  
 <211> 330

<212> PRT  
<213> Homo sapiens

<400> 4974

```

Met Ala Asp Ile Asp Asn Lys Glu Gln Ser Glu Leu Asp Gln Asp Leu
1           5           10           15
Asp Asp Val Glu Glu Val Glu Glu Glu Thr Gly Glu Glu Thr Lys
          20          25          30
Leu Lys Ala Arg Gln Leu Thr Val Gln Met Met Gln Asn Pro Gln Ile
          35          40          45
Leu Ala Ala Leu Gln Glu Arg Leu Asp Gly Leu Val Glu Thr Pro Thr
          50          55          60
Gly Tyr Ile Glu Ser Leu Pro Arg Val Val Lys Arg Arg Val Asn Ala
65          70          75          80
Leu Lys Asn Leu Gln Val Lys Cys Ala Gln Ile Glu Ala Lys Phe Tyr
          85          90          95
Glu Glu Val Met Xaa Leu Lys Gly Ser Met Leu Ser Leu Ser
          100          105          110

```

<210> 4975  
<211> 303  
<212> PRT  
<213> Homo sapiens

<400> 4975

```

Met Ala Ala Ala Asn Pro Trp Asp Pro Ala Ser Ala Pro Asn Gly Ala
1           5           10           15
Gly Leu Val Leu Gly His Phe Ile Ala Ser Gly Met Val Asn Gln Glu
          20          25          30
Met Leu Asn Met Ser Lys Lys Thr Val Ser Cys Phe Val Asn Phe Thr
          35          40          45
Arg Leu Gln Gln Ile Thr Asn Ile Gln Ala Glu Ile Tyr Gln Lys Asn
          50          55          60
Leu Glu Ile Glu Leu Leu Lys Leu Glu Lys Asp Thr Ala Asp Val Val
65          70          75          80
His Pro Phe Phe Leu Glu Met Lys Ser Cys Tyr Val Ala Gln Ala Gly
          85          90          95
Leu Glu Leu Met Ala
          100

```

<210> 4976  
<211> 348  
<212> PRT  
<213> Homo sapiens

<400> 4976

```

Met Ser Gly Lys Ala Asn Ala Ser Lys Lys Asn Ala Gln Gln Leu Lys
1           5           10           15
Arg Asn Pro Lys Arg Lys Lys Asp Asn Glu Glu Val Val Leu Ser Glu
          20          25          30
Asn Lys Val Arg Asn Thr Val Lys Lys Asn Lys Asn His Leu Lys Asp
          35          40          45
Leu Ser Ser Glu Gly Gln Thr Lys His Thr Asn Leu Xaa His Gly Lys
          50          55          60

```

004220" 666E7560

Thr Ala Ala Ser Lys Arg Lys Thr Trp Gln Pro Leu Ser Lys Ser Thr  
65 70 75 80  
Arg Asp His Leu Gln Thr Met Met Glu Ser Val Ile Met Thr Ile Leu  
85 90 95  
Xaa Asn Ser Ile Xaa Glu Lys Glu Xaa Ile Xaa Tyr His Leu Asn Phe  
100 105 110  
Leu Lys Lys Arg  
115

<210> 4977  
<211> 384  
<212> PRT  
<213> Homo sapiens

<400> 4977  
Met Ala Asp Gly Lys Ala Gly Asp Glu Lys Pro Glu Lys Ser Gln Arg  
1 5 10 15  
Ala Gly Ala Ala Gly Arg Pro Glu Glu Glu Ala Glu Lys Pro Val Lys  
20 25 30  
Thr Lys Thr Val Ser Ser Ser Asn Gly Gly Glu Ser Ser Ser Arg Ser  
35 40 45  
Ala Glu Lys Arg Ser Ala Glu Glu Glu Ala Ala Asp Leu Pro Thr Lys  
50 55 60  
Pro Thr Lys Ile Ser Lys Phe Gly Phe Ala Ile Gly Ser Gln Thr Thr  
65 70 75 80  
Lys Lys Ala Ser Ala Ile Ser Ile Xaa Leu Gly Ser Ser Lys Xaa Lys  
85 90 95  
Glu Thr Val Pro Thr Leu Ala Pro Lys Thr Leu Ser Val Ala Ala Ala  
100 105 110  
Phe Xaa Glu Asp Glu Gly Ser Glu Pro Glu Glu Met Pro Pro Glu Ala  
115 120 125

<210> 4978  
<211> 246  
<212> PRT  
<213> Homo sapiens

<400> 4978  
Met Asn Arg Leu Pro Asp Asp Tyr Asp Pro Tyr Ala Val Glu Glu Pro  
1 5 10 15  
Ser Asp Glu Glu Pro Ala Leu Ser Arg Trp Ala Pro Ala Pro Xaa Trp  
20 25 30  
Pro Pro Arg Ile Trp Val Glu Ala Trp Leu Trp Ser Pro Pro Phe Val  
35 40 45  
Ala Pro Ala Glu Pro Thr Gln Thr Leu Ala Ala Arg Glu Pro Val Val  
50 55 60  
Pro Val Thr Cys Ala Xaa Gln Arg Ala Phe Leu Met Gly Ser Arg Ser  
65 70 75 80  
Pro Gly

<210> 4979  
<211> 354  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 4979

```

Met Asn Arg Leu Pro Asp Asp Tyr Asp Pro Tyr Ala Val Glu Glu Pro
1          5          10          15
Ser Asp Glu Glu Pro Ala Leu Ser Ser Ser Glu Asp Glu Val Asp Val
          20          25          30
Leu Leu His Gly Thr Pro Asp Gln Lys Arg Lys Leu Ile Arg Glu Cys
          35          40          45
Leu Thr Gly Glu Ser Glu Ser Ser Ser Glu Asp Glu Phe Glu Lys Glu
          50          55          60
Met Glu Ala Glu Leu Asn Ser Thr Met Lys Thr Met Glu Asp Lys Leu
65          70          75          80
Ser Ser Leu Gly Thr Gly Ser Ser Ser Gly Asn Gly Lys Val Ala Thr
          85          90          95
Ala Pro Thr Arg Tyr Tyr Asp Asp Ile Tyr Xaa Asp Ser Asp Ser Glu
          100          105          110
Asp Glu Asp Arg Ala Val
          115

```

&lt;210&gt; 4980

&lt;211&gt; 246

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4980

```

Met Asp Asp Phe Glu Arg Arg Arg Glu Leu Arg Arg Gln Lys Arg Glu
1          5          10          15
Glu Met Arg Leu Glu Ala Glu Arg Ile Ala Tyr Gln Arg Asn Asp Asp
          20          25          30
Asp Glu Glu Glu Ala Ala Arg Glu Arg Arg Arg Arg Ala Arg Gln Glu
          35          40          45
Arg Leu Arg Gln Lys Gln Glu Glu Glu Ser Leu Xaa Gln Val Thr Asp
          50          55          60
Gln Val Glu Val Asn Ala Gln Asn Ser Val Pro Asp Glu Glu Ala Lys
65          70          75          80
Thr Thr

```

&lt;210&gt; 4981

&lt;211&gt; 258

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4981

```

Met Ala Ala Gln Gly Glu Pro Gln Val Gln Phe Lys Leu Val Leu Val
1          5          10          15
Gly Asp Gly Gly Thr Gly Lys Thr Thr Phe Val Lys Arg His Leu Thr
          20          25          30
Gly Glu Phe Glu Lys Lys Tyr Val Ala Thr Leu Gly Val Glu Val His
          35          40          45
Pro Leu Val Phe His Thr Asn Arg Gly Pro Ile Lys Phe Asn Val Trp
          50          55          60
Asp Thr Ala Gly Gln Glu Lys Phe Gly Gly Leu Arg Asp Gly Tyr Tyr
65          70          75          80
Ile Leu Thr Gln Ala Thr

```



<210> 4982  
 <211> 429  
 <212> PRT  
 <213> Homo sapiens

<400> 4982  
 Met Ala Ala Gln Gly Glu Pro Gln Val Gln Phe Lys Leu Val Leu Val  
 1 5 10 15  
 Gly Asp Gly Gly Thr Gly Lys Thr Thr Phe Val Lys Arg His Leu Thr  
 20 25 30  
 Gly Glu Phe Glu Lys Lys Tyr Val Ala Thr Leu Gly Val Glu Val His  
 35 40 45  
 Pro Leu Val Phe His Thr Asn Arg Gly Pro Ile Lys Phe Asn Val Trp  
 50 55 60  
 Asp Thr Ala Gly Gln Glu Lys Phe Gly Gly Leu Arg Asp Gly Tyr Tyr  
 65 70 75 80  
 Ile Gln Ala Gln Cys Ala Ile Ile Met Phe Asp Val Thr Ser Arg Val  
 85 90 95  
 Thr Tyr Lys Asn Val Pro Asn Trp His Arg Asp Leu Val Arg Val Cys  
 100 105 110  
 Glu Asn Ile Pro Ile Val Leu Cys Gly Asn Lys Val Asp Ile Lys Asp  
 115 120 125  
 Arg Lys Val Lys Ala Lys Ser Ile Val Phe His Arg Lys Lys Asn  
 130 135 140

<210> 4983  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 4983  
 Met Ala Asp Lys Pro Asp Met Gly Glu Ile Ala Ser Phe Asp Lys Ala  
 1 5 10 15  
 Lys Leu Xaa Glu Lys Arg Arg Arg Arg Arg Arg Thr Pro Cys Arg Pro  
 20 25 30  
 Lys Arg Pro Leu Ser Arg Arg Ser Gly Val Lys Phe Pro Lys Ile Leu  
 35 40 45  
 Val Asn Gly Leu Val  
 50

<210> 4984  
 <211> 174  
 <212> PRT  
 <213> Homo sapiens

<400> 4984  
 Met Ala Asp Lys Pro Asp Met Gly Glu Ile Ala Ser Phe Asp Lys Ala  
 1 5 10 15  
 Lys Leu Lys Lys Thr Glu Thr Gln Glu Lys Asn Thr Leu Pro Thr Lys  
 20 25 30  
 Glu Ser Glu Cys Ala Ser Val Ser Arg Ala Pro Ala Gln Pro Leu Thr  
 35 40 45

Leu Leu Phe Leu Ala Asn Pro Leu Leu His  
50 55

<210> 4985  
<211> 402  
<212> PRT  
<213> Homo sapiens

<400> 4985  
Met Glu Tyr Leu Ile Gly Ile Gln Gly Pro Asp Tyr Val Leu Val Ala  
1 5 10 15  
Ser Asp Arg Val Ala Ala Ser Asn Ile Val Gln Met Lys Asp Asp His  
20 25 30  
Asp Lys Met Phe Lys Met Ser Glu Lys Ile Leu Leu Leu Cys Val Gly  
35 40 45  
Glu Ala Gly Asp Thr Val Gln Phe Ala Glu Tyr Ile Gln Lys Asn Val  
50 55 60  
Gln Leu Tyr Lys Met Arg Asn Gly Tyr Glu Leu Ser Pro Thr Ala Ala  
65 70 75 80  
Ala Asn Phe Thr Arg Arg Asn Leu Ala Asp Cys Leu Arg Ser Arg Thr  
85 90 95  
Pro Tyr His Val Asn Leu Leu Leu Ala Gly Tyr Asp Glu His Glu Gly  
100 105 110  
Pro Ala Leu Tyr Tyr Met Asp Tyr Leu Ala Ala Leu Ala Lys Ala Leu  
115 120 125  
Leu Gln Pro Thr Ala Met  
130

<210> 4986  
<211> 279  
<212> PRT  
<213> Homo sapiens

<400> 4986  
Met Glu Tyr Leu Ile Gly Ile Gln Gly Pro Asp Tyr Xaa Leu Val Ala  
1 5 10 15  
Ser Asp Arg Val Ala Ala Ser Asn Ile Val Xaa Xaa Lys Asp Gly Tyr  
20 25 30  
Glu Leu Ser Pro Thr Ala Ala Ala Asn Phe Thr Arg Arg Asn Leu Ala  
35 40 45  
Asp Cys Leu Arg Ser Arg Xaa Pro Tyr His Val Asn Leu Leu Leu Ala  
50 55 60  
Xaa Tyr Asp Glu His Glu Gly Pro Ala Leu Tyr Tyr Met Asp Tyr Leu  
65 70 75 80  
Ala Ala Leu Ala Lys Ala Leu Leu Gln Pro Thr Ala Met  
85 90

<210> 4987  
<211> 162  
<212> PRT  
<213> Homo sapiens

<400> 4987  
Met Lys Gln Pro Ile Met Ala Asp Gly Pro Arg Cys Lys Arg Arg Lys

1 5 10 15  
 Gln Ala Asn Pro Arg Arg Lys Asn Gly Lys Lys Gln Pro Glu Pro Asn  
 20 25 30  
 Phe Ser Gly Pro Leu Arg Gly Ser Arg Pro Arg Glu Lys Glu Gly Glu  
 35 40 45  
 Arg Glu Arg Asn Arg Gly  
 50

<210> 4988  
 <211> 399  
 <212> PRT  
 <213> Homo sapiens

<400> 4988  
 Met Val His Ala Glu Ala Phe Ser Arg Pro Leu Ser Arg Asn Glu Val  
 1 5 10 15  
 Val Gly Leu Ile Phe Arg Leu Thr Ile Phe Gly Ala Val Thr Tyr Phe  
 20 25 30  
 Thr Ile Lys Trp Met Val Asp Ala Ile Asp Pro Thr Arg Lys Gln Lys  
 35 40 45  
 Val Glu Ala Gln Lys Gln Ala Glu Lys Leu Met Lys Gln Ile Gly Val  
 50 55 60  
 Lys Asn Val Lys Leu Ser Glu Tyr Glu Met Ser Ile Ala Ala His Leu  
 65 70 75 80  
 Val Asp Pro Leu Asn Met His Val Thr Trp Ser Asp Ile Ala Gly Leu  
 85 90 95  
 Asp Asp Val Ile Thr Asp Leu Lys Asp Thr Val Ile Leu Pro Ile Lys  
 100 105 110  
 Lys Lys His Leu Phe Glu Asn Ser Arg Leu Leu Gln Pro Pro Lys Gly  
 115 120 125  
 Val Leu Leu Tyr Gly  
 130

<210> 4989  
 <211> 303  
 <212> PRT  
 <213> Homo sapiens

<400> 4989  
 Met Tyr Leu Lys Ser Asp Ser Gly Leu Gly Gly Trp Ile Thr Ile Pro  
 1 5 10 15  
 Ala Val Ala Asp Val Leu Lys Tyr Ser Cys Ile Val Cys Trp Ser Ser  
 20 25 30  
 Arg Glu Lys Asn Asn Val Glu Gln Asp Leu Lys Glu Lys Glu Asp Thr  
 35 40 45  
 Ile Lys Gln Arg Thr Ser Glu Val Gln Asp Leu Gln Asp Glu Val Gln  
 50 55 60  
 Arg Glu Asn Thr Asn Leu Gln Lys Leu Gln Ala Gln Lys Gln Gln Val  
 65 70 75 80  
 Gln Glu Leu Leu Asp Glu Leu Asp Glu Gln Lys Ala Gln Leu Glu Glu  
 85 90 95  
 Gln Leu Lys Glu Val  
 100

<210> 4990  
 <211> 195  
 <212> PRT  
 <213> Homo sapiens

<400> 4990  
 Met Ala Asp Glu Ile Asp Phe Thr Thr Gly Asp Ala Gly Ala Ser Ser  
 1 5 10 15  
 Xaa Tyr Pro Met Gln Cys Ser Ala Leu Arg Lys Asn Gly Phe Val Val  
 20 25 30  
 Leu Lys Gly Arg Pro Cys Lys Ile Val Glu Met Ser Thr Ser Lys Thr  
 35 40 45  
 Gly Lys His Gly His Ala Lys Val His Leu Val Gly Ile Asp Ile Phe  
 50 55 60  
 Xaa  
 65

<210> 4991  
 <211> 339  
 <212> PRT  
 <213> Homo sapiens

<400> 4991  
 Met Ala Met Ile Ser Gly Leu Ser Gly Arg Lys Ser Ser Thr Gly Ser  
 1 5 10 15  
 Pro Thr Ser Pro Leu Asn Ala Glu Lys Leu Glu Ser Glu Glu Asp Val  
 20 25 30  
 Ser Gln Ala Phe Leu Glu Ala Val Ala Glu Glu Lys Pro His Val Lys  
 35 40 45  
 Pro Tyr Phe Ser Lys Thr Ile Arg Asp Leu Glu Val Val Glu Gly Ser  
 50 55 60  
 Ala Ala Arg Phe Asp Cys Lys Ile Glu Gly Tyr Pro Asp Pro Glu Val  
 65 70 75 80  
 Val Trp Phe Lys Asp Asp Gln Ser Ile Arg Glu Ser Arg His Phe Gln  
 85 90 95  
 Ile Asp Tyr Asp Glu Asp Gly Asn Cys Ser Leu Ile Ile Ser Asp Val  
 100 105 110  
 Cys

<210> 4992  
 <211> 303  
 <212> PRT  
 <213> Homo sapiens

<400> 4992  
 Met Ala Ala Ser Ser Ser Ser Ser Ala Gly Gly Val Ser Gly Ser  
 1 5 10 15  
 Ser Val Thr Gly Ser Gly Phe Ser Val Ser Asp Leu Ala Pro Pro Arg  
 20 25 30  
 Lys Ala Leu Phe Thr Tyr Pro Lys Gly Ala Gly Glu Met Leu Glu Asp  
 35 40 45  
 Gly Ser Glu Arg Phe Leu Cys Glu Ser Val Phe Ser Tyr Gln Val Ala  
 50 55 60  
 Ser Thr Leu Lys Gln Val Lys His Asp Gln Gln Val Ala Arg Met Glu



&lt;400&gt; 4995

Met Gln Ser Asp Asp Val Ile Trp Asp Thr Leu Gly Asn Lys Gln Phe  
 1 5 10 15  
 Cys Ser Phe Lys Ile Arg Thr Lys Thr Gln Ser Phe Cys Arg Asn Glu  
 20 25 30  
 Tyr Ser Leu Thr Gly Leu Cys Asn Arg Ser Ser Cys Pro Leu Ala Asn  
 35 40 45  
 Ser Gln Tyr Ala Thr Ile Lys Glu Glu Lys Gly Gln Cys Tyr Leu Tyr  
 50 55 60  
 Met Lys Val Ile Glu Arg Ala Ala Phe Pro Arg Arg Leu Trp Glu Arg  
 65 70 75 80  
 Val Arg Leu Ser Lys Asn Tyr Glu Lys Ala Leu Glu Gln Ile Asp Glu  
 85 90 95  
 Asn Leu Ile Thr  
 100

&lt;210&gt; 4996

&lt;211&gt; 204

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4996

Met Ala Ala Ala Ala Thr Leu Arg Leu Ser Ala Gln Glu Ser His Ser  
 1 5 10 15  
 Val Ile Gln Thr Gly Val Gln Trp Arg Asp His Ser Ser Pro Gln Pro  
 20 25 30  
 Pro Pro Thr Gly Asp Ile Leu Ile Gln Asp Leu Thr Leu Phe Pro Arg  
 35 40 45  
 Leu Glu Cys Asp Gly Thr Ile Ser Ala Asp Cys Xaa Leu His Phe Pro  
 50 55 60  
 Gly Arg Leu Phe  
 65

&lt;210&gt; 4997

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 4997

Met Ala Ala Ala Ala Thr Leu Arg Leu Ser Ala Gln Ile Leu His Trp  
 1 5 10 15  
 Met Asp Gln Arg Thr Thr His Arg Pro Val Ile Trp Val Asn Gln Phe  
 20 25 30  
 Cys His Pro Thr Xaa Asn Arg Lys Gln His Glu Lys Leu Thr Leu Thr  
 35 40 45  
 Pro Tyr Glu Ser Ile Ser Asn Gln Thr Asp Gln His  
 50 55 60

&lt;210&gt; 4998

&lt;211&gt; 198

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

004220"662560

<400> 4998

Met Ala Ala Ala Thr Leu Arg Leu Ser Ala Gln Glu Ser Arg Ser  
 1 5 10 15  
 Val Ile Gln Thr Gly Val Gln Trp Arg Asp His Ser Ser Pro Gln Pro  
 20 25 30  
 Pro Pro Thr Gly Asp Ile Leu Ile Gln Gln Leu Leu Gly Thr Ile  
 35 40 45  
 Leu Asn Trp Ala Glu Arg Pro Ser Gln Thr Arg Gly Arg Gln Met Ala  
 50 55 60  
 Pro Val  
 65

<210> 4999

<211> 228

<212> PRT

<213> Homo sapiens

<400> 4999

Met Leu Gly Leu Asp Glu Leu Gly Arg Ser Gly Cys Gly His Cys Thr  
 1 5 10 15  
 Gln Ala Asp Leu Arg Phe Gly Asp Ala Ala Gly Arg Asp Pro Gly Xaa  
 20 25 30  
 Asp Xaa Xaa Gln Xaa Xaa Arg Arg Ala Xaa Val Pro Pro Pro Arg  
 35 40 45  
 Val Met Ala Ala Ala Ala Ala Leu Arg Ala Pro Ala Gln Val Val Gly  
 50 55 60  
 Met Glu Gly Lys Met Arg Gln His Leu Leu Ser Arg  
 65 70 75

<210> 5000

<211> 387

<212> PRT

<213> Homo sapiens

<400> 5000

Met Ala Lys Val Glu Gln Pro Val Pro Asp His Ser Glu Leu Val Glu  
 1 5 10 15  
 Asp Ser Ser Pro Asp Ser Glu Pro Val Asp Leu Phe Ser Asp Asp Ser  
 20 25 30  
 Ile Pro Asp Val Pro Gln Lys Gln Asp Glu Thr Val Met Leu Val Lys  
 35 40 45  
 Glu Ser Leu Thr Glu Thr Ser Phe Glu Ser Met Ile Glu Tyr Glu Asn  
 50 55 60  
 Lys Glu Lys Leu Ser Ala Leu Pro Pro Glu Gly Gly Lys Pro Tyr Leu  
 65 70 75 80  
 Glu Ser Phe Lys Leu Ser Leu Asp Asn Thr Lys Asp Thr Leu Leu Pro  
 85 90 95  
 Asp Glu Val Ser Thr Leu Ser Lys Lys Xaa Xaa Ile Pro Leu Gln Met  
 100 105 110  
 Glu Glu Leu Ser Thr Ala Val Tyr Ser Asn Asp Asp Leu Phe Ile Ser  
 115 120 125  
 Lys

<210> 5001

<211> 408  
 <212> PRT  
 <213> Homo sapiens

<400> 5001

Met	Ala	Thr	Leu	Lys	Glu	Lys	Leu	Ile	Ala	Pro	Val	Ala	Glu	Glu	Glu
1				5					10					15	
Ala	Thr	Val	Pro	Asn	Asn	Lys	Ile	Thr	Val	Val	Gly	Val	Gly	Gln	Val
		20					25						30		
Gly	Met	Ala	Cys	Ala	Ile	Ser	Ile	Leu	Gly	Lys	Ser	Leu	Ala	Asp	Glu
	35					40						45			
Leu	Ala	Leu	Val	Asp	Val	Leu	Glu	Asp	Lys	Leu	Lys	Gly	Glu	Met	Met
	50					55					60				
Asp	Leu	Gln	His	Gly	Ser	Leu	Phe	Leu	Gln	Thr	Pro	Lys	Ile	Val	Ala
65				70					75						80
Asp	Lys	Asp	Tyr	Ser	Val	Thr	Ala	Asn	Ser	Lys	Ile	Val	Val	Val	Thr
			85					90					95		
Ala	Gly	Val	Arg	Gln	Gln	Xaa	Gly	Glu	Ser	Arg	Leu	Asn	Leu	Val	Gln
		100					105						110		
Arg	Asn	Val	Asn	Val	Phe	Lys	Phe	Ile	Ile	Pro	Gln	Ile	Val	Lys	Tyr
	115					120						125			
Ser	Pro	Asp	Cys	Ile	Ile	Ile	Val								
	130					135									

<210> 5002  
 <211> 237  
 <212> PRT  
 <213> Homo sapiens

<400> 5002

Met	Ala	Thr	Leu	Lys	Glu	Lys	Leu	Ile	Ala	Pro	Val	Ala	Glu	Glu	Xaa
1				5					10					15	
Ala	Thr	Val	Pro	Asn	Asn	Lys	Ile	Thr	Val	Val	Gly	Val	Gly	Gln	Val
		20					25						30		
Gly	Met	Ala	Cys	Ala	Ile	Ser	Ile	Leu	Gly	Lys	Val	His	Phe	Lys	Asn
	35					40						45			
Thr	Ile	Asp	Asp	Arg	Glu	Val	Gln	His	Val	Tyr	Thr	Val	Ser	Leu	Gly
	50					55				60					
Thr	Leu	Glu	Phe	Tyr	Tyr	Ile	Phe	Lys	Arg	Phe	Leu	Phe	Phe	Leu	
65				70					75						

<210> 5003  
 <211> 417  
 <212> PRT  
 <213> Homo sapiens

<400> 5003

Met	Ala	Met	Val	Ser	Glu	Phe	Leu	Lys	Gln	Ala	Trp	Phe	Ile	Glu	Asn
1				5					10					15	
Glu	Glu	Gln	Glu	Tyr	Val	Gln	Thr	Val	Lys	Ser	Ser	Lys	Gly	Gly	Pro
		20					25						30		
Gly	Ser	Ala	Val	Ser	Pro	Tyr	Pro	Thr	Phe	Asn	Pro	Ser	Ser	Asp	Val
	35					40						45			
Ala	Ala	Leu	His	Lys	Ala	Ile	Met	Val	Lys	Gly	Val	Asp	Glu	Ala	Thr



50		55		60
Ile Ile Asp Ile Leu Thr Lys Arg Asn Asn Ala Gln Arg Gln Gln Ile				
65		70		75
Lys Ala Ala Tyr Leu Gln Glu Thr Gly Lys Pro Leu Asp Glu Thr Leu				80
	85		90	95
Lys Lys Ala Leu Thr Gly His Leu Glu Glu Val Val Leu Ala Leu Leu				
	100		105	110
Lys Thr Pro Ala Gln Phe Asp Ala Asp Glu Leu Arg Ala Ala Met Lys				
	115		120	125
Gly Leu Gly Thr Asp Glu Asp Thr Leu Ile Glu				
130		135		

<210> 5004  
 <211> 369  
 <212> PRT  
 <213> Homo sapiens

<400> 5004

Met Ser Ala Ser Gln Asp Ser Arg Ser Arg Asp Asn Gly Pro Asp Gly				
1	5		10	15
Met Glu Pro Glu Gly Val Ile Glu Ser Asn Trp Asn Glu Ile Val Asp				
	20		25	30
Ser Phe Asp Asp Met Asn Leu Ser Glu Ser Leu Leu Arg Gly Ile Tyr				
	35		40	45
Ala Tyr Gly Phe Glu Lys Pro Ser Ala Ile Gln Gln Arg Ala Ile Leu				
	50		55	60
Pro Cys Ile Lys Gly Tyr Asp Val Ile Ala Gln Ala Gln Ser Gly Thr				
65	70		75	80
Gly Lys Thr Ala Thr Phe Ala Ile Ser Ile Leu Gln Gln Ile Glu Leu				
	85		90	95
Asp Leu Lys Ala Thr Gln Ala Leu Val Leu Ala Pro Thr Arg Glu Leu				
	100		105	110
Ala Gln Gln Val Lys Ser Gly Phe Tyr Ser Leu				
	115		120	

<210> 5005  
 <211> 525  
 <212> PRT  
 <213> Homo sapiens

<400> 5005

Met Asp Pro Asp Gly Val Ile Glu Ser Asn Trp Asn Glu Ile Val Asp				
1	5		10	15
Asn Phe Asp Asp Met Asn Leu Lys Glu Ser Leu Leu Arg Gly Ile Tyr				
	20		25	30
Ala Tyr Gly Phe Glu Lys Pro Ser Ala Ile Gln Gln Arg Ala Ile Ile				
	35		40	45
Pro Cys Ile Lys Gly Tyr Asp Val Ile Ala Gln Ala Gln Ser Gly Thr				
	50		55	60
Gly Lys Thr Ala Thr Phe Ala Ile Ser Ile Leu Gln Gln Leu Glu Ile				
65	70		75	80
Glu Phe Lys Glu Thr Gln Ala Leu Val Leu Ala Pro Thr Arg Glu Leu				
	85		90	95
Ala Gln Gln Ile Gln Lys Val Ile Leu Ala Leu Gly Asp Tyr Met Gly				

[illegible][illegible]

<400> 5007

Met	Ser	Ala	Ser	Gln	Asp	Ser	Arg	Thr	Glu	Pro	Asn	Pro	Glu	Glu	Arg
1				5					10					15	
Pro	Arg	Glu	Ala	Pro	Gly	Ala	His	Pro	Ala	Pro	Gly	Gly	Arg	Val	His
			20					25					30		
Phe	Ala	Ala	Gln	Ala	Gly	Leu	Leu	Ala	Asn	Cys	Gly	Trp	Ala	Gly	Pro
		35					40					45			
Pro	Ser	Phe	Gly	Gly	Glu	Arg	Pro	Glu	Ile	Gln	Arg	Gln	Trp		
	50					55					60				

```

<400> 5008
Met Glu Lys Leu Tyr Ser Glu Asn Glu Gly Met Ala Ser Asn Gln Gly
1          5          10          15
Lys Met Glu Asn Glu Glu Gln Pro Gln Asp Glu Arg Lys Pro Glu Val
20          25          30
Thr Cys Thr Leu Glu Asp Lys Lys Leu Glu Asn Glu Gly Lys Thr Xaa
35          40          45

```

Asn Lys Arg Lys  
50

<210> 5009  
<211> 201  
<212> PRT  
<213> Homo sapiens

<400> 5009  
Met Ala Glu Gly Glu Arg Val Cys Ala Ser Val Val Pro Ser Ala Leu  
1 5 10 15  
Arg Thr Leu Lys Arg Arg Ser Asn Leu Ser Arg Ile Pro Ala Gly Gln  
20 25 30  
Glu Lys Glu Gly Lys Ser Arg His Val Ala Pro Pro Phe Arg Phe Phe  
35 40 45  
Pro Phe Ser Gly Phe Leu Phe Phe Gly Phe Leu Phe Pro Val Phe Ser  
50 55 60  
Phe Pro Ser  
65

<210> 5010  
<211> 156  
<212> PRT  
<213> Homo sapiens

<400> 5010  
Met Glu Lys Leu Tyr Ser Glu Asn Glu Gly Met Ala Ser Xaa Gln Gly  
1 5 10 15  
Lys Met Glu Asn Glu Glu Gln Pro Gln Asp Glu Arg Lys Pro Glu Val  
20 25 30  
Thr Cys Thr Leu Glu Asp Lys Lys Leu Glu Asn Glu Gly Lys Thr Xaa  
35 40 45  
Asn Lys Arg Lys  
50

<210> 5011  
<211> 222  
<212> PRT  
<213> Homo sapiens

<400> 5011  
Met Met Ser Pro Leu Lys Asn Ser Ser Asp Gly Leu Thr Ser Leu Asn  
1 5 10 15  
Gln Ser Asn Ser Thr Leu Val Ala Leu Pro Glu Gly Arg Gln Glu Leu  
20 25 30  
Ser Asp Gly Gln Val Lys Thr Gly Ile Ser Met Ser Leu Leu Thr Val  
35 40 45  
Ile Glu Lys Leu Arg Glu Arg Thr Asp Gln Asn Ala Ser Asp Asp Asp  
50 55 60  
Ile Leu Lys Glu Leu Gln Asp Asn Ala Gln  
65 70

<210> 5012  
<211> 306

<212> PRT  
<213> Homo sapiens

<400> 5012

Met	Pro	Arg	Ile	Met	Ile	Lys	Gly	Gly	Val	Trp	Arg	Asn	Thr	Glu	Asp
1			5						10					15	
Glu	Ile	Leu	Lys	Ala	Ala	Val	Met	Lys	Tyr	Gly	Lys	Asn	Gln	Trp	Ser
		20						25					30		
Arg	Ile	Ala	Ser	Leu	Leu	His	Arg	Lys	Ser	Ala	Lys	Gln	Cys	Lys	Ala
		35					40					45			
Arg	Trp	Tyr	Glu	Trp	Leu	Asp	Pro	Ser	Ile	Lys	Lys	Thr	Glu	Trp	Ser
	50					55					60				
Arg	Glu	Glu	Glu	Glu	Lys	Leu	Leu	His	Leu	Ala	Lys	Leu	Met	Pro	Thr
65					70					75					80
Gln	Trp	Arg	Thr	Ile	Ala	Pro	Ile	Ile	Gly	Arg	Thr	Ala	Ala	Gln	Cys
				85					90					95	
Leu	Glu	His	Tyr	Glu	Phe										
				100											

<210> 5013  
<211> 330  
<212> PRT  
<213> Homo sapiens

<400> 5013

Met	Ala	Ala	Ala	Ala	Val	Gln	Gly	Gly	Arg	Ser	Gly	Gly	Ser	Gly	Gly
1				5					10					15	
Cys	Ser	Gly	Ala	Gly	Gly	Ala	Ser	Asn	Cys	Gly	Thr	Gly	Ser	Gly	Arg
			20					25					30		
Ser	Gly	Leu	Leu	Asp	Lys	Trp	Lys	Ile	Asp	Asp	Lys	Pro	Val	Lys	Ile
		35					40					45			
Asp	Lys	Trp	Asp	Gly	Ser	Ala	Val	Lys	Asn	Ser	Leu	Asp	Asp	Ser	Ala
	50					55					60				
Lys	Lys	Glu	Lys	Ser	Ile	Phe	Leu	Val	Ala	His	Arg	Lys	Asp	Pro	Thr
65					70					75					80
Gly	Met	Asp	Pro	Asp	Asp	Ile	Trp	Gln	Leu	Ser	Ser	Ser	Xaa	Lys	Arg
				85					90					95	
Phe	Asp	Asp	Lys	Tyr	Thr	Leu	Lys	Leu	Thr	Phe	Ile	Ser	Arg		
			100					105					110		

<210> 5014  
<211> 429  
<212> PRT  
<213> Homo sapiens

<400> 5014

Met	Asp	Lys	Met	Ala	Ala	Ala	Xaa	Val	Gln	Gly	Gly	Arg	Ser	Gly	Gly
1				5					10					15	
Ser	Gly	Gly	Cys	Ser	Gly	Ala	Gly	Gly	Ala	Ser	Asn	Cys	Gly	Thr	Gly
			20					25					30		
Ser	Gly	Arg	Ser	Gly	Leu	Leu	Asp	Lys	Trp	Lys	Ile	Asp	Asp	Lys	Pro
		35					40					45			
Val	Lys	Ile	Asp	Lys	Trp	Asp	Gly	Ser	Ala	Val	Lys	Asn	Ser	Leu	Asp
	50					55					60				

Asp Ser Ala Lys Lys Val Leu Leu Glu Lys Tyr Lys Tyr Val Glu Asn  
 65 70 75 80  
 Phe Gly Leu Ile Asp Gly Arg Leu Thr Ile Cys Thr Ile Ser Cys Phe  
 85 90 95  
 Phe Ala Ile Val Ala Leu Ile Trp Asp Tyr Met His Pro Phe Pro Glu  
 100 105 110  
 Ser Lys Pro Val Leu Ala Leu Cys Val Ile Ser Tyr Phe Val Met Met  
 115 120 125  
 Gly Ile Leu Thr Ile Tyr Thr Ser Tyr Lys Glu Lys Ser Ile Phe  
 130 135 140

<210> 5015  
 <211> 420  
 <212> PRT  
 <213> Homo sapiens

<400> 5015  
 Met Ala Ala Ala Val Gln Gly Gly Arg Ser Gly Gly Ser Gly Gly  
 1 5 10 15  
 Cys Ser Gly Ala Gly Gly Ala Ser Asn Cys Gly Thr Gly Ser Gly Arg  
 20 25 30  
 Ser Gly Leu Leu Asp Lys Trp Lys Ile Asp Asp Lys Pro Val Lys Ile  
 35 40 45  
 Asp Lys Trp Asp Gly Ser Ala Val Lys Asn Ser Leu Asp Asp Ser Ala  
 50 55 60  
 Lys Lys Val Leu Leu Glu Lys Tyr Lys Tyr Val Glu Asn Phe Gly Leu  
 65 70 75 80  
 Ile Asp Gly Arg Leu Thr Ile Cys Thr Ile Ser Cys Phe Phe Ala Ile  
 85 90 95  
 Val Ala Leu Ile Trp Asp Tyr Met His Pro Phe Pro Glu Ser Lys Pro  
 100 105 110  
 Val Leu Ala Leu Cys Val Ile Ser Tyr Phe Val Met Met Gly Ile Leu  
 115 120 125  
 Thr Ile Tyr Thr Ser Tyr Lys Glu Lys Ser Ile Phe  
 130 135 140

<210> 5016  
 <211> 342  
 <212> PRT  
 <213> Homo sapiens

<400> 5016  
 Met Gly Arg Ile Phe Leu Asp His Ile Gly Gly Thr Arg Leu Phe Ser  
 1 5 10 15  
 Cys Ala Asn Cys Asp Thr Ile Leu Thr Asn Arg Ser Glu Leu Ile Ser  
 20 25 30  
 Thr Arg Phe Thr Gly Ala Thr Gly Arg Ala Phe Leu Phe Asn Lys Val  
 35 40 45  
 Val Asn Leu Gln Tyr Ser Glu Val Gln Asp Arg Val Met Leu Thr Gly  
 50 55 60  
 Arg His Met Val Arg Asp Val Ser Cys Lys Asn Cys Asn Ser Lys Leu  
 65 70 75 80  
 Gly Trp Ile Tyr Glu Phe Ala Thr Glu Asp Ser Gln Arg Tyr Lys Glu  
 85 90 95

Gly Arg Val Ile Leu Xaa Arg Ala Leu Val Arg Glu Xaa Glu Gly Leu  
 100 105 110  
 Arg Ser

<210> 5017  
 <211> 354  
 <212> PRT  
 <213> Homo sapiens

<400> 5017  
 Met Ser Arg Ser Tyr Asn Asp Glu Leu Gln Phe Leu Glu Lys Ile Asn  
 1 5 10 15  
 Lys Asn Cys Trp Arg Ile Lys Lys Gly Phe Val Pro Asn Met Gln Val  
 20 25 30  
 Glu Gly Val Phe Tyr Val Asn Asp Ala Leu Glu Lys Leu Met Phe Glu  
 35 40 45  
 Glu Leu Arg Asn Ala Cys Arg Gly Gly Gly Val Gly Gly Phe Leu Pro  
 50 55 60  
 Ala Met Lys Gln Ile Gly Asn Val Ala Ala Leu Pro Gly Ile Val His  
 65 70 75 80  
 Arg Ser Ile Gly Leu Pro Asp Val His Ser Gly Tyr Gly Phe Ala Ile  
 85 90 95  
 Gly Asn Met Ala Ala Phe Asp Met Asn Asp Pro Glu Ala Val Val Ser  
 100 105 110  
 Pro Gly Gly Val Gly Phe  
 115

<210> 5018  
 <211> 198  
 <212> PRT  
 <213> Homo sapiens

<400> 5018  
 Met Glu Ala Asp Ala Ser Val Asp Met Phe Ser Lys Val Leu Glu His  
 1 5 10 15  
 Gln Leu Leu Gln Thr Thr Lys Leu Val Glu Glu His Leu Asp Ser Glu  
 20 25 30  
 Ile Gln Lys Leu Asp Gln Met Asp Glu Asp Glu Leu Glu Arg Leu Lys  
 35 40 45  
 Glu Lys Arg Leu Gln Ala Leu Arg Lys Ala Gln Gln Gln Xaa Gln Glu  
 50 55 60  
 Trp Leu  
 65

<210> 5019  
 <211> 369  
 <212> PRT  
 <213> Homo sapiens

<400> 5019  
 Met Ala Ala Ile Gly Arg Gly Arg Ser Leu Lys Asn Leu Arg Val Arg  
 1 5 10 15  
 Gly Arg Asn Asp Ser Gly Glu Glu Asn Val Pro Leu Asp Leu Thr Arg  
 20 25 30

Glu Pro Ser Asp Asn Leu Arg Glu Ile Leu Gln Asn Val Ala Arg Leu  
           35                  40                  45  
 Gln Gly Val Ser Asn Met Arg Lys Leu Gly His Leu Asn Asn Phe Thr  
           50                  55                  60  
 Lys Leu Leu Cys Asp Ile Gly His Ser Glu Glu Lys Leu Gly Phe His  
 65                  70                  75                  80  
 Tyr Glu Asp Ile Ile Cys Leu Arg Leu Ala Leu Leu Asn Glu Ala  
                   85                  90                  95  
 Lys Glu Val Arg Ala Ala Gly Leu Arg Ala Leu Arg Tyr Leu Ile Gln  
                   100                  105                  110  
 Asp Ser Ser Ile Leu Gln Lys Val Leu Lys Leu  
           115                  120

<210> 5020  
 <211> 417  
 <212> PRT  
 <213> Homo sapiens

<400> 5020  
 Met Asp Xaa Leu Val Ser Glu Cys Ser Ala Arg Leu Leu Gln Gln Glu  
 1                  5                  10                  15  
 Glu Glu Ile Lys Ser Leu Thr Ala Glu Ile Asp Arg Leu Lys Asn Cys  
           20                  25                  30  
 Gly Cys Leu Gly Ala Ser Pro Asn Leu Glu Gln Leu Gln Glu Asn  
           35                  40                  45  
 Leu Lys Leu Lys Tyr Arg Leu Asn Ile Leu Arg Lys Ser Leu Gln Ala  
 50                  55                  60  
 Glu Arg Asn Lys Pro Thr Lys Asn Met Ile Asn Ile Ile Ser Arg Leu  
 65                  70                  75                  80  
 Gln Glu Val Phe Gly His Ala Ile Lys Ala Ala Tyr Pro Asp Leu Glu  
                   85                  90                  95  
 Asn Pro Pro Leu Leu Val Thr Pro Ser Gln Gln Ala Lys Phe Gly Asp  
                   100                  105                  110  
 Tyr Gln Cys Asn Ser Ala Met Gly Ile Ser Gln Met Leu Lys Thr Lys  
           115                  120                  125  
 Glu Gln Lys Val Asn Pro Arg Glu Ile Ala Glu  
           130                  135

<210> 5021  
 <211> 297  
 <212> PRT  
 <213> Homo sapiens

<400> 5021  
 Met Arg Gln Lys Lys Ile Arg Glu Asp His Lys Ser Tyr Tyr Ala Ile  
 1                  5                  10                  15  
 Asn Thr Val Tyr Val Tyr Gly Gln Glu Lys Tyr Leu Leu Leu His Asp  
           20                  25                  30  
 Ile Ser Glu Ser Glu Phe Leu Thr Glu Ala Glu Ile Ile Cys Asp Val  
           35                  40                  45  
 Val Cys Leu Val Tyr Asp Val Ser Asn Pro Lys Ser Phe Glu Tyr Cys  
           50                  55                  60  
 Ala Arg Ile Phe Lys Gln His Phe Met Asp Ser Arg Ile Pro Cys Leu  
 65                  70                  75                  80

Ile Val Ala Ala Lys Ser Asp Leu His Glu Val Lys Gln Glu Tyr Ser  
 85 90 95  
 Ile Ser Pro

<210> 5022  
 <211> 345  
 <212> PRT  
 <213> Homo sapiens

<400> 5022  
 Met Pro Gly Arg His Val Ser Arg Val Arg Ala Leu Tyr Lys Arg Val  
 1 5 10 15  
 Leu Gln Leu Xaa Arg Val Leu Pro Pro Asp Leu Lys Ser Leu Gly Asp  
 20 25 30  
 Gln Tyr Val Lys Asp Glu Phe Arg Arg His Lys Thr Val Gly Ser Asp  
 35 40 45  
 Glu Ala Gln Arg Phe Leu Gln Glu Trp Glu Val Tyr Ala Thr Ala Leu  
 50 55 60  
 Leu Gln Gln Ala Asn Glu Asn Arg Gln Asn Ser Thr Gly Lys Ala Cys  
 65 70 75 80  
 Phe Gly Thr Phe Leu Pro Glu Glu Lys Leu Asn Asp Phe Arg Asp Glu  
 85 90 95  
 Gln Ile Gly Gln Leu Gln Glu Leu Met Gln Glu Ala Thr Lys Pro Asn  
 100 105 110  
 Arg Gln Phe  
 115

<210> 5023  
 <211> 225  
 <212> PRT  
 <213> Homo sapiens

<400> 5023  
 Met Thr Leu Ser Val Leu Ser Arg Lys Asp Lys Glu Arg Val Ile Arg  
 1 5 10 15  
 Arg Leu Leu Leu Gln Ala Pro Pro Gly Glu Phe Val Asn Ala Phe Asp  
 20 25 30  
 Asp Leu Cys Leu Leu Ile Arg Asp Glu Lys Leu Met His His Gln Gly  
 35 40 45  
 Glu Cys Ala Gly His Gln His Cys Gln Xaa Tyr Ser Val Pro Leu Cys  
 50 55 60  
 Ile Asp Gly Xaa Pro Val Leu Leu Ser His His  
 65 70 75

<210> 5024  
 <211> 426  
 <212> PRT  
 <213> Homo sapiens

<400> 5024  
 Met Ser Tyr Pro Ala Asp Asp Tyr Glu Ser Glu Ala Ala Tyr Asp Pro  
 1 5 10 15  
 Tyr Ala Tyr Pro Ser Asp Tyr Asp Met His Thr Gly Asp Pro Lys Gln  
 20 25 30



Asp Leu Ala Tyr Glu Arg Gln Tyr Glu Gln Gln Thr Tyr Gln Val Ile  
           35                          40                          45  
 Pro Glu Val Ile Lys Asn Phe Ile Gln Tyr Phe His Lys Thr Val Ser  
           50                          55                          60  
 Asp Leu Ile Asp Gln Lys Val Tyr Glu Leu Gln Ala Ser Arg Val Ser  
   65                          70                          75                          80  
 Ser Asp Val Ile Asp Gln Lys Val Tyr Glu Ile Gln Asp Ile Tyr Glu  
                           85                          90                          95  
 Asn Ser Trp Thr Lys Leu Thr Glu Arg Phe Phe Lys Asn Thr Pro Trp  
                   100                          105                          110  
 Pro Glu Ala Glu Ala Ile Ala Pro Gln Val Gly Asn Asp Ala Val Phe  
           115                          120                          125  
 Leu Ile Leu Tyr Lys Glu Leu Tyr Tyr Arg His Ile Tyr Ala  
           130                          135                          140

<210> 5025  
 <211> 459  
 <212> PRT  
 <213> Homo sapiens

<400> 5025  
 Met Leu Gly Ala Gln Trp Arg Arg Asn Gln Pro Ser Arg Ala Ala Glu  
   1                          5                          10                          15  
 Glu Trp Ser Gln His Ile Asn Gly Ala Ser His Ser Arg Arg Cys Gln  
           20                          25                          30  
 Leu Leu Leu Glu Ile Tyr Pro Glu Trp Asn Pro Asp Asn Asp Thr Gly  
           35                          40                          45  
 His Thr Met Gly Asp Pro Phe Met Leu Gln Gln Ser Thr Asn Pro Ala  
           50                          55                          60  
 Pro Gly Ile Leu Gly Pro Pro Pro Pro Ser Phe His Leu Gly Gly Pro  
   65                          70                          75                          80  
 Ala Val Gly Pro Arg Gly Asn Leu Gly Ala Gly Asn Gly Asn Leu Gln  
                           85                          90                          95  
 Gly Pro Arg His Met Gln Lys Gly Arg Val Glu Thr Ser Arg Val Val  
                           100                          105                          110  
 His Ile Met Asp Phe Gln Arg Gly Lys Asn Leu Arg Tyr Gln Leu Leu  
           115                          120                          125  
 Gln Leu Val Glu Pro Phe Gly Val Ile Ser Asn His Leu Ile Leu Asn  
           130                          135                          140  
 Lys Ile Asn Glu Ala Phe Ile Glu Met  
   145                          150

<210> 5026  
 <211> 300  
 <212> PRT  
 <213> Homo sapiens

<400> 5026  
 Met Ala Ala Gly Val Glu Ala Ala Ala Glu Val Ala Ala Thr Glu Ile  
   1                          5                          10                          15  
 Lys Met Glu Glu Glu Ser Gly Ala Pro Gly Val Pro Ser Gly Asn Gly  
           20                          25                          30  
 Ala Pro Gly Pro Lys Gly Glu Gly Glu Arg Pro Ala Gln Asn Glu Lys  
           35                          40                          45

Arg Lys Glu Lys Asn Ile Lys Arg Gly Gly Asn Arg Phe Glu Pro Tyr  
 50 55 60  
 Ala Asn Pro Thr Lys Arg Tyr Arg Ala Phe Ile Thr Asn Ile Pro Phe  
 65 70 75 80  
 Asp Val Lys Trp Gln Ser Leu Lys Asp Leu Val Lys Glu Lys Val Gly  
 85 90 95  
 Glu Val Thr Tyr  
 100

<210> 5027  
 <211> 255  
 <212> PRT  
 <213> Homo sapiens

<400> 5027  
 Met Arg Met Thr Met Glu Glu Met Lys Asn Glu Ala Glu Thr Thr Ser  
 1 5 10 15  
 Met Val Ser Met Pro Leu Tyr Ala Val Met Tyr Pro Val Phe Asn Glu  
 20 25 30  
 Leu Glu Arg Val Asn Leu Ser Ala Ala Gln Thr Leu Arg Ala Ala Phe  
 35 40 45  
 Ile Lys Ala Glu Lys Glu Asn Pro Gly Leu Thr Gln Asp Ile Ile Met  
 50 55 60  
 Lys Ile Leu Glu Lys Lys Ser Val Glu Val Asn Phe Thr Xaa Ser Leu  
 65 70 75 80  
 Leu Arg Met Ala Ala  
 85

<210> 5028  
 <211> 255  
 <212> PRT  
 <213> Homo sapiens

<400> 5028  
 Met Arg Met Thr Met Glu Glu Met Lys Asn Glu Ala Glu Thr Thr Ser  
 1 5 10 15  
 Met Val Ser Met Pro Leu Tyr Ala Val Met Tyr Pro Val Phe Asn Glu  
 20 25 30  
 Leu Glu Arg Val Asn Leu Ser Ala Ala Gln Thr Leu Arg Ala Ala Phe  
 35 40 45  
 Ile Lys Ala Glu Lys Glu Asn Pro Gly Leu Thr Gln Asp Ile Ile Met  
 50 55 60  
 Lys Ile Leu Glu Lys Lys Ser Val Glu Val Asn Phe Thr Xaa Ser Leu  
 65 70 75 80  
 Leu Arg Met Ala Ala  
 85

<210> 5029  
 <211> 246  
 <212> PRT  
 <213> Homo sapiens

<400> 5029  
 Met Gly Lys Gly Arg Phe Asp Glu Lys Glu Asn Val Ser Asn Cys Ile

**SECRET**

<400> 5030															
Met	Phe	Lys	Lys	Phe	Asp	Glu	Lys	Glu	Asn	Val	Ser	Asn	Cys	Ile	Gln
1				5					10					15	
Leu	Lys	Thr	Ser	Val	Ile	Lys	Gly	Ile	Lys	Asn	Gln	Leu	Ile	Glu	Gln
			20					25					30		
Phe	Pro	Gly	Ile	Glu	Pro	Trp	Leu	Asn	Gln	Ile	Met	Pro	Lys	Lys	Asp
		35					40					45			
Pro	Val	Lys	Ile	Val	Arg	Cys	His	Glu	His	Ile	Glu	Ile	Leu	Thr	Val
	50					55					60				
Asn	Gly	Glu	Leu	Leu	Phe	Arg	Gln	Arg	Glu	Gly	Pro	Phe	Tyr	Pro	
65					70					75				80	
Thr	Leu	Arg	Leu	Leu	His	Lys	Tyr	Pro	Phe	Ile	Leu	Pro	His		
				85					90						

```

<400> 5031
Met Gly Ala Val Lys Pro Ile Ser Met Lys Thr Cys Cys Gln His Gly
1          5          10          15
Asp Arg Gly Tyr Trp Ser Thr Gly Tyr Tyr Trp Arg Gly Gly Pro Asp
          20          25          30
Asp Asn Leu Ile Glu Gly Gly Gly Thr Lys Phe Val Cys Lys Pro Gly
          35          40          45
Ala Arg Asn Ile Thr Val Ile Phe His Pro Leu Leu Arg Phe Ile Gln
          50          55          60
Glu Ile Xaa His Ala Leu Gly Leu Gly Pro Ala Lys Gln Cys Pro Leu
65          70          75          80
Arg Glu Phe Leu Thr Val Tyr Ile Lys Asn Ile Phe Leu Asn Gln Val
          85          90          95
Leu Ala Glu Ile
          100

```

2995

<213> Homo sapiens

<400> 5032

Met Ser Thr Ile Gln Asn Leu Gln Ser Phe Asp Pro Phe Ala Asp Ala  
1 5 10 15  
Thr Lys Gly Asp Asp Leu Leu Pro Ala Gly Thr Glu Asp Tyr Ile His  
20 25 30  
Ile Arg Ile Gln Gln Arg Asn Gly Arg Lys Thr Leu Thr Thr Val Gln  
35 40 45  
Gly Ile Ala Asp Asp Tyr Asp Lys Lys Lys Leu Val Lys Ala Phe Lys  
50 55 60  
Lys Lys Phe Ala Cys Asn Gly Thr Val Ile Glu His Pro Glu Tyr Gly  
65 70 75 80  
Glu Val Ile Gln Leu Gln Gly Xaa Gln Arg Lys Thr Ser Ala Ser Phe  
85 90 95

<210> 5033

<211> 300

<212> PRT

<213> Homo sapiens

<400> 5033

Met Cys Phe Pro Lys Val Leu Ser Asp Asp Met Lys Lys Leu Lys Ala  
1 5 10 15  
Arg Met Val Met Ser Ser Leu Ala Glu Leu Glu Asp Asp Phe Lys Glu  
20 25 30  
Gly Tyr Leu Glu Thr Val Ala Ala Tyr Tyr Glu Glu Gln His Pro Glu  
35 40 45  
Leu Thr Pro Leu Leu Glu Lys Glu Arg Asp Gly Leu Arg Cys Arg Gly  
50 55 60  
Asn Arg Ser Pro Val Pro Asp Val Glu Asp Pro Ala Thr Glu Glu Pro  
65 70 75 80  
Gly Glu Ser Phe Cys Asp Lys Val Met Arg Trp Phe Gln Ala Met Leu  
85 90 95  
Gln Arg Leu Gln  
100

<210> 5034

<211> 306

<212> PRT

<213> Homo sapiens

<400> 5034

Met Gly Thr Pro Lys Pro Arg Ile Leu Pro Trp Leu Val Ser Gln Leu  
1 5 10 15  
Asp Leu Gly Gln Leu Glu Gly Val Ala Trp Val Asn Lys Ser Arg Thr  
20 25 30  
Arg Phe Arg Ile Pro Trp Lys His Gly Leu Arg Gln Asp Ala Gln Gln  
35 40 45  
Glu Asp Phe Gly Ile Phe Gln Ala Trp Ala Glu Ala Thr Gly Ala Tyr  
50 55 60  
Val Pro Gly Arg Asp Lys Pro Asp Leu Pro Thr Trp Lys Arg Asn Phe  
65 70 75 80  
Arg Ser Ala Leu Asn Arg Lys Glu Gly Leu Arg Leu Ala Glu Asp Arg

85  
Ser Lys Xaa Pro His Asp  
100

90

95

<210> 5035  
<211> 327  
<212> PRT  
<213> Homo sapiens

<400> 5035  
Met Lys Phe Val Tyr Lys Glu Glu His Pro Phe Glu Lys Arg Arg Ser  
1 5 10 15  
Glu Gly Glu Lys Ile Arg Lys Lys Tyr Pro Asp Arg Val Pro Val Ile  
20 25 30  
Val Glu Lys Ala Pro Lys Ala Arg Ile Gly Asp Leu Asp Lys Lys Lys  
35 40 45  
Tyr Leu Val Pro Ser Asp Leu Thr Val Gly Gln Phe Tyr Phe Leu Ile  
50 55 60  
Arg Lys Arg Ile His Leu Arg Ala Glu Asp Ala Leu Phe Phe Phe Val  
65 70 75 80  
Asn Asn Val Ile Pro Thr Ser Val Ser Leu Val Leu Pro Gln Thr  
85 90 95  
Leu Thr Asn His Asn Thr His Leu Thr Glu Ser Leu Ser  
100 105

<210> 5036  
<211> 180  
<212> PRT  
<213> Homo sapiens

<400> 5036  
Met Met Glu Val Glu Ser Ser Tyr Ser Asp Phe Ile Ser Cys Asp Arg  
1 5 10 15  
Thr Gly Arg Arg Asn Ala Val Pro Asp Ile Gln Gly Asp Ser Glu Ala  
20 25 30  
Val Ser Val Arg Lys Leu Ala Gly Asp Met Gly Glu Leu Ala Leu Glu  
35 40 45  
Gly Glu Pro Trp His Trp Pro Ser Ser Leu Phe Ser  
50 55 60

<210> 5037  
<211> 288  
<212> PRT  
<213> Homo sapiens

<400> 5037  
Met Xaa Ser Glu Ile His Met Thr Gly Pro Met Cys Leu Ile Glu Asn  
1 5 10 15  
Thr Asn Gly Arg Leu Met Ala Asn Pro Glu Ala Leu Lys Ile Leu Ser  
20 25 30  
Ala Ile Thr Gln Pro Met Val Val Ala Ile Val Gly Leu Tyr Arg  
35 40 45  
Thr Gly Lys Ser Tyr Leu Met Asn Lys Leu Ala Gly Lys Lys Lys Gly  
50 55 60

Phe Ser Leu Gly Ser Thr Val Gln Ser His Thr Lys Gly Ile Trp Met  
 65 70 75 80  
 Trp Cys Xaa Pro His Pro Lys Lys Pro Gly His Ile Leu Val Leu Leu  
 85 90 95

<210> 5038  
 <211> 372  
 <212> PRT  
 <213> Homo sapiens

<400> 5038  
 Met Ala Pro Lys Arg Gln Ser Pro Leu Pro Pro Gln Lys Lys Lys Pro  
 1 5 10 15  
 Arg Pro Pro Pro Ala Leu Gly Pro Glu Glu Thr Ser Ala Ser Ala Gly  
 20 25 30  
 Leu Pro Lys Lys Gly Glu Lys Glu Gln Gln Glu Ala Ile Glu His Ile  
 35 40 45  
 Asp Glu Val Gln Asn Glu Ile Asp Arg Leu Asn Glu Gln Ala Ser Glu  
 50 55 60  
 Glu Ile Leu Lys Val Glu Gln Lys Tyr Asn Lys Leu Arg Gln Pro Phe  
 65 70 75 80  
 Phe Gln Lys Arg Ser Glu Leu Ile Ala Lys Ile Pro Asn Phe Trp Val  
 85 90 95  
 Thr Thr Phe Val Asn His Pro Gln Val Ser Ala Leu Leu Gly Glu Glu  
 100 105 110  
 Asp Glu Glu Ala Leu His Tyr Leu Thr Arg Val Glu  
 115 120

<210> 5039  
 <211> 294  
 <212> PRT  
 <213> Homo sapiens

<400> 5039  
 Met Ala Ala Ser Ile Val Arg Arg Gly Met Leu Leu Ala Arg Gln Val  
 1 5 10 15  
 Val Leu Pro Gln Leu Ser Pro Ala Gly Lys Arg Tyr Leu Leu Ser Ser  
 20 25 30  
 Ala Tyr Val Asp Ser His Lys Trp Glu Ala Arg Glu Lys Glu His Tyr  
 35 40 45  
 Cys Leu Ala Asp Leu Ala Ser Leu Met Asp Lys Thr Phe Glu Arg Lys  
 50 55 60  
 Leu Pro Val Ser Ser Leu Thr Ile Ser Arg Leu Ile Asp Asn Ile Ser  
 65 70 75 80  
 Ser Arg Glu Glu Ile Asp His Ala Glu Tyr Tyr Leu Tyr Lys Phe Arg  
 85 90 95  
 His Ser

<210> 5040  
 <211> 324  
 <212> PRT  
 <213> Homo sapiens

<400> 5040

Met Glu Ala Tyr Glu Gln Val Gln Lys Gly Pro Leu Lys Leu Lys Gly  
 1 5 10 15  
 Val Ala Glu Leu Gly Val Thr Lys Arg Lys Lys Lys Lys Lys Asp Lys  
 20 25 30  
 Asp Lys Ala Lys Leu Leu Glu Ala Met Gly Thr Ser Lys Lys Asn Glu  
 35 40 45  
 Glu Glu Lys Arg Arg Gly Leu Asp Lys Arg Thr Pro Ala Gln Ala Ala  
 50 55 60  
 Phe Glu Lys Met Gln Glu Lys Arg Gln Met Xaa Arg Xaa Leu Lys Xaa  
 65 70 75 80  
 Ala Ser Lys Thr His Lys Gln Lys Ser Gly Gly Leu Gln Gln Thr Pro  
 85 90 95  
 Gly Xaa Xaa His Gly Ala Leu Arg His Ser Gln Ser  
 100 105

<210> 5041  
 <211> 285  
 <212> PRT  
 <213> Homo sapiens

<400> 5041  
 Met Ser Arg Pro Leu Ser Asp Gln Glu Lys Arg Lys Gln Ile Ser Val  
 1 5 10 15  
 Arg Gly Leu Ala Gly Val Glu Asn Val Thr Glu Leu Lys Lys Asn Phe  
 20 25 30  
 Asn Arg His Leu His Phe Thr Leu Val Lys Asp Arg Asn Val Ala Thr  
 35 40 45  
 Pro Arg Asp Tyr Tyr Phe Ala Leu Ala His Thr Val Arg Asp His Leu  
 50 55 60  
 Val Gly Arg Trp Ile Arg Thr Gln Gln His Tyr Tyr Glu Lys Asp Pro  
 65 70 75 80  
 Lys Ala Glu Asp Leu Leu Pro Val Phe Arg Val Leu Tyr Gly Thr  
 85 90 95

<210> 5042  
 <211> 330  
 <212> PRT  
 <213> Homo sapiens

<400> 5042  
 Met Ser Asp Asp Ile Asp Trp Leu Arg Ser His Arg Gly Val Cys Lys  
 1 5 10 15  
 Val Asp Leu Tyr Asn Pro Glu Gly Gln Gln Asp Gln Asp Arg Lys Val  
 20 25 30  
 Ile Cys Phe Val Asp Val Ser Thr Leu Asn Val Glu Asp Lys Asp Tyr  
 35 40 45  
 Lys Asp Ala Ala Ser Ser Ser Ser Glu Gly Asn Leu Asn Leu Gly Ser  
 50 55 60  
 Leu Glu Glu Lys Glu Ile Ile Val Ile Lys Asp Thr Glu Lys Lys Asp  
 65 70 75 80  
 Gln Ser Lys Thr Glu Gly Ser Val Cys Leu Phe Lys Gln Ala Pro Ser  
 85 90 95  
 Asp Pro Val Ser Val Leu Asn Trp Leu Leu Ser Asp Leu Gln  
 100 105 110

[illegible][illegible]

<400> 5044

```
<210> 5045
<211> 198
<212> PRT
<213> Homo sapiens
```

Met Ala Cys Gly Phe Arg Arg Ala Ile Ala Cys Gln Leu Ser Arg Val